NORTH FORK SALT RIVER WBID 0113

Recreational Use Attainability Analysis

May 2007

PREPARED FOR:

RFP No: B3Z07134

Water Quality Monitoring & Assessment Section

Water Protection Program

Division of Environmental Quality

MISSOURI DEPARTMENT OF NATURAL RESOURCES

P O Box 176 Jefferson City, MO 65102

PREPARED BY:

MEC WATER RESOURCES, INC.

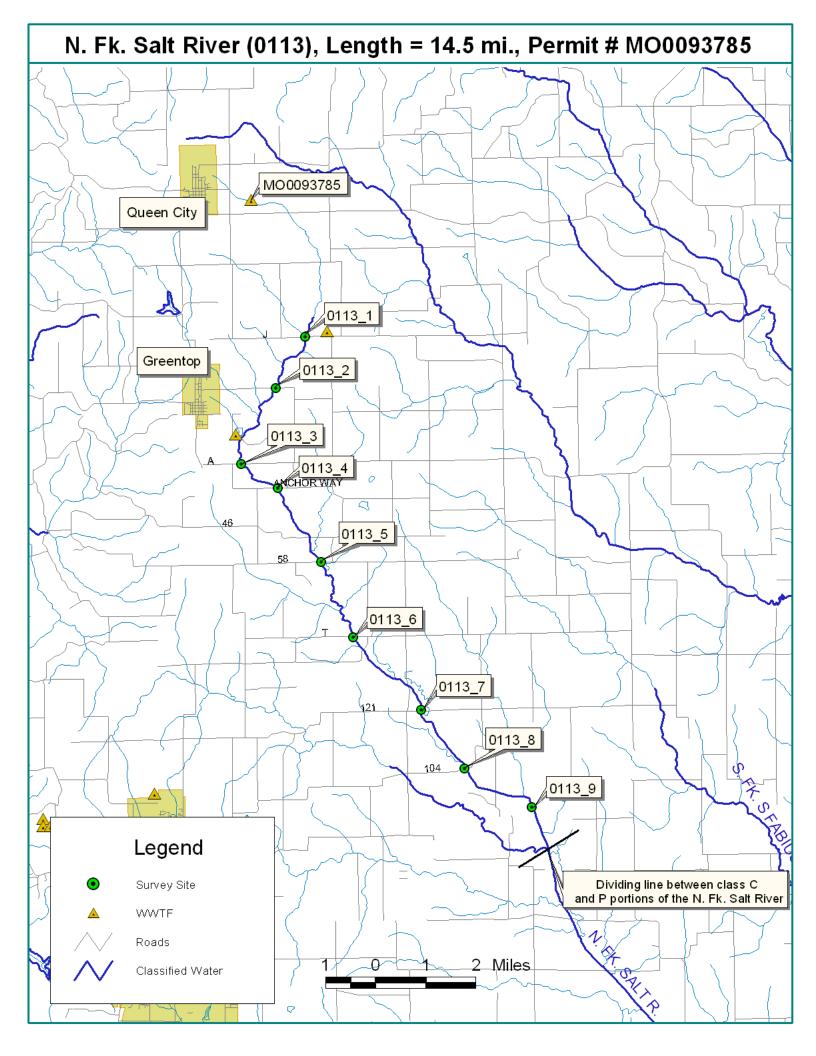
1123 Wilkes Blvd., Ste. 400 Columbia, MO 65201

Data Sheet A - Water Body Identification

I.	Water Body Information (For water body being surv	reyed)
	Water Body Name (from USGS 7.5' quad):	rth Fork Salt Rilver
	Missouri Water Body Identification (WBID) Numb	
	8-digit HUC: 07110005	County: Schuyler/Adair
	Upstream Legal Description (from Table H):	12, 624N, 15W
	Downstream Legal Description(from Table H):	2,62 N.14W
	Number of sites evaluated 9	
	List all sites numbers, listed ensequantly upstream 13- HWY A 4-ANCHOR WAY	to downstream: 1- HWY J 2- EASY WAY 5- COUNTY 1270 58 L- HWY T
		4 RD 104 9-14WH 11
П	L. Subsegmentation (fill this section out only in case LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PRO.	es where subsegmentation is being proposed)
	Upstream Coordinates: UTM X Y	Downstream Coordinates: UTM X Y
	HORIZONTAL COLLECTION METHOD (Indicate the method used to determine Global Positioning System (GPS)	e the locational data.) Interpolation
	Static Mode	Topographic Map or DRG
	Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
	Precise Positioning Service	Satellite Imagery
	Signal Averaging	Interpolation Other
	Real Time Differential Processing	
	HORIZONTAL ACCURACY ESTIMATE GPS Data Quality	Internal dise Date Coully
	FOM ± Meters	Interpolation Data Quality Source Map Scale: 1:24,000 1:100,000 Other
	EPE	
	PDOP	±Feet or ±Meters
III	. Discharger Facility Information (list all permitted	
	Discharger Facility Name(s):	
	Discharger Permit Number(s):	WWTF
	MO 00937	Q (~~
IV	LUAA Surveyor (please print legibly)	· ·
	Name of Surveyor RENEE MARTIN	Telephone Number: (573) 443-4100
	Organization/Employer: MEC Water B.	esources
	Position: ENVIR SPECIALIST	
Ple	ease verify that you have completed all sections, c	hecked all applicable boxes and that everything is
CO	mplete.	Date: 5/21/07
218	gned: //Mus /Nast	
	5-23-6 AL 5/24/	97
	AL 5/24/	67

Page 1

February 16, 2007



WBID#	0113
Site#	

Data Sheet B - Site Characterization

		Service + Service -		0:4	Tantina Dana	-i-+i (
Date & Time:		5/21/07	0715			ription (e.g., road crossing):		
		RMARTIN & J.	FOTH	1 1	ry J			
Current Weather	Conditions	: Mean				NEEN CITY WHIT	<u> </u>	
		10 days: When	W. S.	1				
		ought □; Phase I □	····	Phase	· III □· Phase l	IV [] · Unknown []		
		ought 🗀, Thase T 🗀	, i nase n 🗀,	Tilase	, III L., I Hase I	, Olikilowii		
Locations:		IIVERSAL TRANSVERS	E MERCATOR F	ROJE	CTION. IN METER	S		
		MX: 05402	_			68574		
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Static Mode	Global I	Positioning System (G	PS)	1	Topograr	Interpolat ohic Map or DRG	ion	T 7
Dynamic Mode (Kinematic)			1		otograph or DOQQ		+
Precise Positioni				$\forall \neg$	Satellite			$\pm \chi -$
Signal Averaging				\times	 	tion Other		
Real Time Differ	ential Proces	ssing		1				
HORIZONTAL A								
=0.1		GPS Data Quality				Interpolation Da	ta Quality	No. 15 has shell if
FOM	±	Meters	·····		Source	Map Scale: 1:24,000 1:100,	,000 Other	
EPE	±	Feet or ±	Meters	**********		±Feet or ±	Meters	
PDOP		January Comments of the Commen						
otos:								
Photo ID#		Photo Purpose and D		T	Photo ID#		se and Direction	
(WBID_Site#_##) のN3_1_185	. 100 TO 50	(upstream, downstream, o		: 1	(WBID_Site#_##)	(upstream, d	lownstream, other)	
2115-1-100				.				
	LUVEST	ock waternon						
0113-1-186	POWNS	TREAM SITE #	TRANSECT	世				
es Ohserver	1*• Л]сес •	actually observed	d at time of	curv	9 v /)			
☐ Swimming	. (0303	Skin diving				☐ Tubing	☐ Water sk	iina
				***************************************	urving			inig
☐ Wind surfing	5	☐ Kayaking	□ Во			□ Wading	Rafting	
☐ Hunting		☐ Trapping	☐ Fis	_		None of the above	☐ Other:	
_	Describe: (Include number of <i>Use Interview</i> when conducting							
Describe: (Inclu			ng, photo-docu	menta	tion of evidence	e of recreational uses, etc. U	se <i>Data Sheet D</i> -	Recreation
Describe: (Inclu			ng, photo-docu	menta	tion of evidence	e of recreational uses, etc. U	se Data Sheet D-	Recreation
Describe: (Inclu			ng, photo-docu	menta	tion of evidence	e of recreational uses, etc. U	se <i>Data Sheet D-</i>	Recreation
Describe: (Inclu			ng, photo-docu	menta	tion of evidence	e of recreational uses, etc. U	se Data Sheet D-	Recreation
Describe: (Inclu Use Interview w	hen conduc	ting interviews.)						Recreation
Describe: (Inclu Use Interview w	ondition	s*: (Mark all that pror		ecreatio	onal uses. Attach p	ohotos of evidence or unusual ite	ems of interest.)	
Describe: (Inclu Use Interview w	ondition	S*: (Mark all that pror	note or impede re	ecreation	onal uses. Attach p	ohotos of evidence or unusual ite	ems of interest.)	unds
Describe: (Inclu Use Interview w rrounding C City/county Boating accord	condition parks esses	S*: (Mark all that pror Playgrounds State parks	note or impede re MDC con National	ecreation servat	onal uses. Attach p	ohotos of evidence or unusual ite Urban areas Nature trails	ems of interest.) Campgro	ounds
Describe: (Inclu Use Interview w	condition parks esses	S*: (Mark all that pror	note or impede re	ecreation servat	onal uses. Attach p	ohotos of evidence or unusual ite	ems of interest.)	unds
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WBID#_	0113
Site#	-

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

□ Roads	☐ Rope swings	☐ Foot paths/prin	nte 🗆 D	ock/platform	Livestock	Waterine	При	ATV Tracks
					1/ 1			
☐ Camping Si	ites	☐ Fire pit/ring	LINI	PDES Discharge	☐ Fishing T	'ackle	☐ Othe	r:
Comments.								
ream Morph	iology:							
	iew's Physical Des	If so,		er present at a obvious curr			l No No	
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RIFFLE								
RUN								
POOL								
Channel Featur			Width (m)	Length	(m) Me	dian Depth	(m)	Max. Depth (m
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Channel Featur RIFFLE	re Distance from	n access (m)	Width (m)	Length	(m) Me	dian Depth	(m)	Max. Depth (m
RUN								
POOL								
	tation*: (Note amo	ount of vegetation	n or algal g	rowth at the a	ssessment sit	e.)		
NON	<u>U</u>			-1				
	teristics*: (Mark	all that apply.)			5.			
ODOR:		☐ Sewage	□ Musky	☐ Chemical	₩ None	☐ Oth	er:	
COLOR:		☐ Clear	☐ Green	□ Gray	☐ Milky	∕ □ Othe	er:	
BOTTOM DEI	POSIT:	☐ Sludge	☐ Solids	Fine sedime	ents 🗆 None	☐ Oth	er:	
WATER SURI	FACE DEPOSITION:	Oil	Scum	☐ Foam	☐ None	☐ Oth	er:	
omments: Pl	lease attach any add	ditional comment	s to this fo	rm.				
his information	is not to be used sol	alv for ramaval -f	a maamaati	al maa d		- 4 · · ·		
morehensive un	derstanding of water creation use analysis	conditions. Conse	equently, th	is information	is not intended	to directly	influenc	e a
cision on the red			, checked	all applicabl	e boxes and t	hat every	ything is	s complete.
cision on the rec	at you have comp	leted all sections	,					
cision on the rec	at you have comp	leted all sections Max		Date of	f Survey:	Elalo	7	
cision on the rec	at you have comp ature: //www. AE Solut 16, 2007	leted all sections Mart Frons	Positi	Date o	f Survey:	ste lo	4	

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Pool	0.0	0.16	0,25	7	0.2 1	0.2 -	12	0:3 2	0.2 2	0.2	0.1	0.	Depth (m)			4		0	IM Y:	n) (heig	Site #:
Pool Pool Pool	6.8	9.6	35	500	Z.	0.4	23.52	Ĺ	, o	. T	0,75	0,1	Distance (m) D	04		JUSTYN	(me	2	JTM X: 0540259 UTM Y: 4468574 Horizontal Accuracy Estimate (GBS Data Onality):	$(\sqrt{10})$ (m) (height between low bank width and water)	01/3
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Bod	3.1	3.0	21	上	2.1	ço	is	1.2	٥	0.6	0,3	0.00	Distance (m) D	05		T-10	Length of Survey Seg (20x average stream width)		-	bank w	
8	0,0	0.1	0,1	0,2	0,2	0.3	3	0.3	0:3	0.3	1.0	2.0	Depth (m)		Transe		of Survige strea	4	13	idth anc	
120	4.4		٦.٦	(v)	2,9	2.5	2.1	.7	100	6,9	20	1,0	Distance (m) D	06	ct Cro		Length of Survey Segment: 0x average stream width)		(feet)	water)	
	0.4 3	0,43	0,4 3	0.4 2	0,4 7	2,5	2	0.5	1 h.0	0,4.	0.2 6	0.1	Depth (m)		Transect Cross-Section		ment:				
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	.o 4,	0,1 4	0,3	0.5	7	B,4 2	7	0.4 1	0.4 1	0,4 0	S.	0,4 6	Depth (m)				(me				
Russ	4	4.1	3,7	2.3	29	2.5	2.1	1.1	.03	0,9	2.0	0,1	(m) D	08			(meters)				0
	0.0	0	~	0.7	0,27	0.3 2	0,21	0,2	0,21	0 / 0	0.2.0	0.1	Depth (m)				Water Temperature:	S	Disso	Disso	Date:
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	0,0	2.0	0.2 1	0,3	12	.v.	0	270	0,2 1.	0.3	0,20	0,6	Depth (m)				ature:	Cond:	Dissolved Oxygen: 45	ygen:_)issolv
\$	2.5	5.10	4.6	4.10	9	- 00	2.60	2.10	.60	0 1.1	6	0 - 1	(m) De	10			15.	144	5.	7 7	Dissolved Oxygen Time:
2	0.0	-	011	0.24	7	0.3	ω 0	イ	Ç.S	S	0 2.0	0.	Depth (m)				7	9	3	/	Time:
No.	4.6	エ	4.950	1.0	O 50'F	.6	3,15	1.7	.350	0.9	0.420	0.0	(m) De	11			(°C)	_(μS/cm)	_(% sat)	_ (mg/L)	2140
	0,0	ō	2,0	12	is	P	0,3	8	W.	0.2	2,0	0,7	Depth (m)								

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as <1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

	Signed:
	1 dance
23	Mint
5-23-	
00	_ Date:
No. of	5/21/07
2	'

WBID#_	0113	
Site#	7	

Date & Time:	-11			Site I	ocation Desc	ription (e.g., road crossing):	The state of the s	
		7 0815			54 WA	-	•	
Personnel (Data	Collectors):	LY MITSHWA	. For H					
Current Weather	r Conditions:	CLEAR				NO DOP 3785	ot F	
W41C1:4	fo Do.et	10 days		Permi	i Number: ¥	10 0012128		
Weather Condit	ions for Past	10 days: UNKN	0W N					
Drought Conditi	ons?: No dr	ought □; Phase I □;	; Phase II □;	Phase II	I □; Phase I	V□; Unknown 🏻		
te Locations	•							
		IIVERSAL TRANSVERSI	E MERCATOR PR	OJECTI	ON, IN METER	S)		
Site GPS Coor	dinates: UT	MX: 0539	312		Y: 41	166924		
HORIZONTAL CO		ETHOD (Indicate the met		mine the)		
	Global F	Positioning System (GF	PS)			Interpola	tion	100000000000000000000000000000000000000
Static Mode	Vinamatia)			-/-,		ohic Map or DRG otograph or DOQQ		++/-
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EPE		Feet or ±	Meters		Source	Map Scale: 1:24,000 1:100	***************************************	
PDOP						±Feet or ±	Meters	
otos:								
Photo ID# (WBID Site# ##)		Photo Purpose and Di (upstream, downstream, of			hoto ID# BID Site# ##)		ose and Direction downstream, other)	
0113_2-187	UPSTREA	M; SITE # 2 TR	ANSECT #1	OLI	3-livestod	L.WATERING, 2 190 DO	WNSTREAM	SITEH
	- LIVE S	STOCK WATER	NG			TRANSECT #3		
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0112-12188	COWNSI	DEAM SITE 由了	LTIGNSECT:	Ħ1				
	-LIVEST	DUK MATERING	7(
as Ohsarvai	d*: (Tlees :	actually observed	l at time of s	nrvev	`			
	a : (C3C3 :	Skin diving				☐ Tubing	☐ Water ski	··
☐ Swimming		Skin diving			ing			ing
☐ Wind surfin	g	☐ Kayaking	☐ Boa	ting		□ Wading	☐ Rafting	
☐ Hunting		☐ Trapping	☐ Fish	ing		None of the above	☐ Other:	
			ng, photo-docur	nentatio	n of evidence	of recreational uses, etc. U	Jse Data Sheet D-	Recreational
Use Interview v	when conduct	ting interviews.)						
rrounding C	ondition	S*: (Mark all that prom	note or impede red	creationa	l uses. Attach p	photos of evidence or unusual i	tems of interest.)	
☐ City/county	parks	☐ Playgrounds	☐ MDC cons	ervation	lands	☐ Urban areas	☐ Campgro	unds
☐ Boating acc	esses	☐ State parks	☐ National f	orests		☐ Nature trails	☐ Stairs/wa	lkway
☐ No trespass		Fence	☐ Steep slop			☐ None of the above	Other:	
LI NO HESPASS	orgii	T. Leuce	L Steep stop			INONE OF the above	L Other.	
Comments:								
1 no. It	e Wossi							

WBID#_	0113
Site#	1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

☐ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	Livestock Watering	ng 🛮 🗆 RV / A	ATV Tracks
☐ Camping Si	tes	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other	•
Comments:		<u> </u>				
eam Morph						
Upstream Vi	iew's Physical Des	scriptions: Is there	any water present at the	his view? □ Yes	□ No	
			there an obvious curre	ent? 🗆 Yes	□ No	
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Chamier readul	e mansect (access (m)	widii (iii)	Length (III) Wicdi	an Depur (m)	Max. Depth (III)
RIFFLE						
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RUN						
DOOL						
POOL						
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bstrate*: (T	Cobble	% Gravel			fud/Clay	% Bedi
bstrate*: (\text{\tin}}\text{\ti}\text{\texi{\text{\texi}\text{\text{\text{\texit{\texi}\text{\texit{\texit{\texit{\texit{\texit{\texi}\texit{\tet{\text{\texi{\texi{\texi{\texi{\texit{\texi{\texi{\texi{\texi{\t	Cobble tation*: (Note amo	% Gravel	% Sand ralgal growth at the a		fud/Clay	% Bedi
bstrate*: (T	Cobble tation*: (Note amo	% Gravel			fud/Clay	% Bedi
bstrate*: (T	Cobble tation*: (Note amo	% Gravel ount of vegetation o			fud/Clay	% Bedi
bstrate*: (T	Cobble tation*: (Note amo	% Gravel ount of vegetation o	r algal growth at the a	ssessment site.)		% Bedi
uatic Veget water Character Charact	Cobble tation*: (Note amo	% Gravel ount of vegetation of all that apply.)	r algal growth at the a	ssessment site.)	Other:	% Bedi
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uatic Veget ater Charac ODOR: COLOR: BOTTOM DE WATER SURI mments: Pl nis information reprehensive un ision on the re- ease verify th	tation*: (Note amount of the company	all that apply.) Sewage Clear Sludge Oil ditional comments telly for removal of a reconditions. Consequents but may point to consequents to consequent	Musky	None	Other: Other: Other: Other: ovide a more only influence another use.	e a

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	wateroc	ody IU.	waterbody ID: CII			olle #.	Sile #: 0/(2 - 4									Dale.	127	0		ا ق ا	a	r,
	Estimate	ed Cha	(WBID_Site#) Estimated Channel Incision: $\mathbb{Z}[\cdot, \circ, (\mathfrak{m})]$ (height between low bank width and water)	sion:	71.0	(m) (he	(WBID_Site#) laht between	Site#) veen lo	v bank	width ar	ોd wate	æ				Diss	Dissolved Oxygen:	xygen:	Ŋ	ナのが	(mg/L)	
	SPS I o	cation	GPS I ocation (taken at transect 1):	transec	+ 1.																`)	
)))	X ML	UTM X: 0636317			JTM Y:	UTM Y: 4466924	7								Diss	Dissolved Oxygen:	xygen:	5)	(% sat)	
		Horizor	Horizontal Accuracy Estimate (GPS Data Quality):	racy Es	timate (GPS D	ata Qua		-/+		(feet)							•	1,010		;	
	Average	Stream	Average Stream Width: 7		~		J.	(meters)		us Jo di	a.S. vava	enoth of Survey Segment S	0		(meters)	-,	Specific	Cond:	Specific Cond:		(µS/cm)	
	8	5	: l	1				(2)	(20x ave	(20x average stream width)	sam widt	ان ان (ب			(2)	Water	Water Temperature:	rature:	2		()	
	Field	Staff:	Field Staff: VENER		MARTIN	7	Ì	277557	0	1+0												
										Trans	ect Cr	Transect Cross-Section	ction									
	9		02		03		9	4	S	2	ľ	90	07	, ,	80	_	60	Ĺ	5		1,	
Measurement	Distance (m)	Denth (m)	Distance (m)	enth (m)	Distance (m)	Denth (m)	Distance (m)	Denth (m)	Distance (m)	Denth (m)	Distance (m)	Depth (m)	Distano (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Deoth (m)	Distance (m)	Depth (m)
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. 2			1		+	, o		9	1,0	, o	9.35	ő	100	0	1 6		****	gagain an	\sqr		F4-	2 0
8	0.34	200	8.0		o w	5.0	0.32	No.	Ŵ	2.	9,0	ő	(o	<i>o</i>	T.	o w	0.2	 	الاصطبان الا	0		w.
4	15:0	Zo.i	18 T. O	707	U Z O	6	84,0		T.0	t o	0.85	m o	S T D	<i>6</i>	و د	6	60	o o	35'1	8'0	Vo.	7,0
5	0 99.0	107	9 0	7007	٥٠		Hai'O	\rightarrow	(S)	ħ'0	and the second	o N	۾ ت	02	Ø.	4	TO	Ö	2,3	9,4	6	5,0
9	0.85	107	2 31.0	7.07	0.75	0	0 %	4.6.1	ە: د	7.0	1.35	25	521	610	0.)	<i>}</i> , ∅	s S	110	2,45	, t'0	2.3	 0
7	1,02	1107	6.0	707	٥ ه.	9 1	2100		7.	≯.°¢	2	2'0	S	5.0	1.2	0 W	9.0	0	5.3	, h'0	1.2	2.0
8	1.19	707	ls o	107	50'1	2.0	71.1	1:07	8.0	<i>}</i> ,′ <i>U</i>	1.85	2:0	S (")	5:0	1.4	20	T. 0	0.0	3,35	0,5	2	2,0
6	98.1	<01	1.2	1.07	7.2	7.0	871	20,1	<i>p</i> . 0	5,0	-1	1.0	۵′۲	610	9"	2:0	0.8	ő	9,0	5.0	3.5	- 1 6
10	10 1,53	1107	1.35/2	1,107	<u>د</u> د	Ö	Hh'	40.1	0:)	2,0	28' 7	~ .	57.2	7:0	00.	ó	<i>5</i> ,	(S)	4,25	5.0	F. 60	5.4
7	7	1107	1.5	1107	り	Š), lo	20,1 am	1	0.1	2.6	0.1	2.5	0.1	2.0	é	6		H, "	0,1	4,3	ō
12	4	0'0	1.5	0,0	Ġ	0.0	71	0,0	2.6	010	6.5	0.	かべ	0.1	Ť	Ø Ø	ő	0	4,9	0.0	4.4	<i>ō</i> ,
Feature Type (riffle, run, or pool)	Mon	7	Run		Cr	7	Z	RUM	575	Pool To Ru	6	70			Ref	أسا	Ğ	Run	J.	F	1000	K
Notes:	Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.	II be measu	rred beginning	a on left de	scending ba	ank and fin	shing on rig	ht descendi	ηα bank.													

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank. GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Signed:

5-23-07 Apr 5/24/07

WBID#_	0113
Site#	3

Data Sheet B - Site Characterization

Date & Time:	5/1/	07 0920	******	Si	Site Location Description (e.g., road crossing):								
					- HWY A								
Personner (Data	Coneciois).	R. MARTIN & J.	FOTH)() 5 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	~~ €					
Current Weather	Current Weather Conditions: () EAC					Facility Name: QUEEN UTY WWTF Permit Number: MO 0093785							
Weather Condit	ions for Past	10 days: UNKN	0000										
Drought Conditi	ions?: No dr	ought □: Phase I □	: Phase II [∃: Pha	nse III □: F	Phase 1	IV □; Unknown ♀						
		ought E, Thase I E	, 11100 11 -	_,	, .	11400	, <u> </u>						
te Locations Location COOR		NIVERSAL TRANSVERS	E MERCATO	R PROJI	ECTION, IN I	VETER	S)						
		TM X: 05381			Y:		464457						
		ETHOD (Indicate the me		letermine	e the location)						
	Global I	Positioning System (G	PS)		/\		Interpolati	on					
Static Mode	(Vinomotio)			+			ohic Map or DRG otograph or DOQQ		\ /				
Dynamic Mode (Precise Position				+			Imagery						
.,				$+ \rightarrow$	√		tion Other		- X				
Signal Averaging		•		$+ \not$	lint	erboia	uon Oulei						
Real Time Differ				$\perp \! \! / \! \! \perp$									
HORIZONTAL A							Internalation Dat	o Ouglitu					
FOM		GPS Data Quality Meters			A 45 45		Interpolation Dat	a Quality	There is the great				
EPE	<u> </u>				s	ource	Map Scale: 1:24,000 1:100,0	000 Other	**************************************				
PDOP	I	Feet or ±	ivietei	<u></u>			±Feet or ±	Feet or ±Meters					
PDOP		(Bellespenson)											
notos:													
Photo ID#		Photo Purpose and D			Photo I		Photo Purpos	se and Direction					
(WBID_Site#_##)	dema	(upstream, downstream, c			(WBID_Site	BID_Site#_##) (upstream, downstream, other)							
0 3 3 ()	- FENCE	N SITE #3 TR	ANSECT +	1									
		CK WATERWAY											
0113-3-194	POWNST	RGAM SITE # 3	TOANSE	ct #1			,						
	-LIVBSTO	OCK MATBRING	3	, ,	F								
	III OTT	,					·						
		actually observed					T						
Swimming		☐ Skin diving		SCUBA	A diving		☐ Tubing	☐ Water skiii	ng				
☐ Wind surfing	g	☐ Kayaking		Boating	g		□ Wading	☐ Rafting					
☐ Hunting		☐ Trapping		Fishing	5		None of the above	☐ Other:					
			ng, photo-do	cumen	ntation of ev	idence	e of recreational uses, etc. Us	se <i>Data Sheet D- F</i>	Recreational				
Use Interview v	vhen conduc	ting interviews.)											
						,							
urrounding C	ondition	IS*: (Mark all that pror	note or imped	e recrea	itional uses. A	Attach 1	photos of evidence or unusual ite	ms of interest.)					
☐ City/county		☐ Playgrounds			ation lands		☐ Urban areas	☐ Campgrou	nds				
☐ Boating acc		☐ State parks	☐ Nation	al fore	ests		☐ Nature trails	☐ Stairs/wall	cway				
☐ No trespass		Fence	☐ Steep										
110 (105puss		1,7-1/2 51100	засер						***************************************				
Comments:													
1													

WBID#	0113
Site#	3

Data Sheet B - Site Characterization

dications of H	uman Use*: (a	ttach photos)			10 /				
Roads	☐ Rope swings	☐ Foot paths/pi	rints D	ock/platform	Livestock	Watering	□ RV / ATV Tracks □ Other:		
☐ Camping Sites	3	☐ Fire pit/ring	□ N	PDES Discharge	☐ Fishing Ta	ackle			
Comments:									
ream Morpho	logy:								
Upstream View	v's Physical Des	-		ter present at the obvious curre			l No No		
Select one of the Channel Feature	ne following cha Transect (#		100000000000000000000000000000000000000	Vidth (m)	Length (m)	Median D	epth (m)	Max. Depth (m)	
RIFFLE									
RUN									
POOL									
Select one of th	iew's Physical I	If nnel features:	so, is there	an obvious cur	rrent?	□ Yes	□ No		
Channel Feature RIFFLE	Distance from	n access (m)	Width (m)	Length (n	n) Med	lian Depth	(m)	Max. Depth (m)	
RUN					Fide:				
POOL									
ubstrate*: (The	ese values should	l add up to 100°	~ %.)	•					
% Co		% Gravel	% Sano		% Silt / 0) % Mud/	/Clay	% Bedro	
uatic Vegetat	tion*: (Note amo	ount of vegetation	on or algal s	rowth at the as	ssessment site	e.)			
Non			3 0						
ater Characte	ristics*: (Mark a	all that apply.)							
ODOR:		☐ Sewage	□ Musky	☐ Chemical	None	☐ Oth	er:		
COLOR:		Clear	☐ Green	☐ Gray	☐ Milky	☐ Othe	er:		
BOTTOM DEPO	SIT:	☐ Sludge	☐ Solids	Fine sedimer	nts 🗆 None	☐ Oth	er:	-	
WATER SURFA	CE DEPOSITION:	□ Oil	☐ Scum	☐ Foam	∕ <mark>⊠</mark> None	☐ Oth	er:		
omments: Plea	se attach any add	litional comme	nts to this fo	orm.					
	·								
mprehensive unde	not to be used sole erstanding of water eation use analysis	conditions. Con	sequently, th	is information is	not intended t	to directly	influenc	ce a	
ease verify that	you have comp	leted all section	ns, checked	all applicable	boxes and t	hat every	ything i	s complete.	
rveyor's Signati	ure: <u> </u>	e Mark	Postopium -	Date of	Survey: 5	1/21/0	72	Marting Advantage Communication Communicatio	
ganization: A	E SOLUTIO	WS	Posit	ion: ENV.	SPEC1,	ALIST	97a69ndon.		
February 1	ure: <u>flame</u> E SOLUTIO 6, 2007	nuc	5-2	3-07	AK 5/2	4/07			

Feature Type (riffle, run, or pool)	12		10		~		•			<i>4.</i> *			Measurement			
	23.5	د (ال	37,15	2,0	8 2 MS	7 2.1	575	5	4 1.05	30.7	20,35	000	Distance (m)			Water Estima GPS I Avera
DUN Serve	3,0	1:07	\ \ \ 2.	∧ 0:	1.07	< 0.1	10.1	20.	70.1	10.	10,1	0,0	Depth (m)	2		Waterbody ID: Estimated Cha GPS Location UTM X: Horizor Average Streal Field Staff:
as ired hen	3,0	<i>3</i>	7,7	にら	2.1	00 	- G	- N	Š.	0	0	0,0	Distance (m)			Waterbody ID: 0//3 Estimated Channel Incision: GPS Location (taken at tran: UTM X: 0 5 38/8 Horizontal Accuracy Horizontal Modulity Saverage Stream Width: Saverage Staff: 126NEE
No principal le	9,0	\(\frac{1}{2} \)	^ ° ~	C	e 0,1	i V	20,	Ç 0 .	0	△ 0.	1.01	0,0	e Depth (m)	02		Waterbody ID: 0//3 Estimated Channel Incision: >1, GPS Location (taken at transect 1): UTM X: 0 5 38 /8 7 Horizontal Accuracy Estimal Average Stream Width: S.~ Field Staff: NEW EE M
ft descend	ر ا ا	S	22	Ņ	2	50	Ö	1.2	0.9	0	6.3	0,0	Distance m) (m)			n:
Transacts will be measured beginning on left descending bank and finishing on notit descending bank.	0.0	₹0,1	\\ \chi_0./		107	0	0	0,-	⊘ 0.1	20.1	\	0,0	Depth (m)	03		Site #: 6//3 - 3 (WBID_Site#) ed Channel Incision: >/,o (m) (height between low bank width and water) cation (taken at transect 1): JTM X: 0538/87 Horizontal Accuracy Estimate (GPS Data Quality): +/- S (feet) e Stream Width: S. (meters) Staff: NEE MARITIN & JUSTYN FOTH Staff: NEE MARITIN & JUSTYN FOTH
finishina o	Se	N	1.	.E	(J)	نې	7	2	~	entings one annual	0	0	Distance (m) (m)			#: b) (WBII height the
n right desc	9	0.	0,7	0.3	6.10	0.2	0:2	0.2	C.	0	0	9	ce Depth (m)	2		wBID_Site#) ght between low 4464457 ata Quality): + (meters) (2
ending bar	0 6,3	O.	1,5	Ţ	(3)	in,	2:0	21	17		0.6	0,	(m) (m)			3 3 3 n low ba 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
200	0,0	Ġ	6.0	Ğ	0015	0,4	9 0.4	0,4	2,4	5	0.3	8	Depth (m)	05	3	v bank width and water) +/- S (feet) Length of Survey Segment: (20x average stream width)
	6,1	57	(7)	7.	4,2	W)	ÇA	72.1	27	Hones	9	0	(m) Distance		insect	n and w (fe
	0	0	5 T	00	2 0.5	0	000	ō	0.0	200	O	0	nce Depth (m)	06	Cross	water) (feet) (rey Segme m width)
ŀ	~ 6/8	6	2 5,95	5.3	39.17	7.	3.35	6 2	2.05	1.4	0.75	0,	Distance (m)		Transect Cross-Section	
Dex 1	0.0	<i>o</i>	15 012	00 00	0,0	0 0	35 0,6	70,5	5:0:5	4 0,4	0.4	5.1		07	nc	0
	QJ.	ν.	respect	エエ	O)	3,3		<u> </u>	 `	**************************************	25	┼	Depth (m) (I			(meters)
<i>d</i> 8	9	S	28,	-	PS S	3	2.75 0.4	2.2 0.	5	ô	+	0,0	(m) Dep	08		O
	0		3	F	0,4 4		N	T	C,	₩ -	0.0	070	Depth (m)			ate: Shall or Dissolved Oxygen: Dissolved Oxygen: Specific Cond: Water Temperature:
200	0	0 -7 -0	0.15	4.6	20.17	20	98 0.4	2.40	59'1	<i>□</i>	10 %	0,20	(m) De	09		e: 5/24 / 074 Dissolved Oxygen: Dissolved Oxygen: Specific Cond: Specific Cond:
F	0	 	0.23	W	0,42	0.4 2		0,4 1.	- F	S	Ø	0 -	Depth (m)			te: Sparlor: Specific Cond: 4
POUN	0	ر ا	3,35	0 0	2.5	700	1.95	6	1,25 0	0	0 4 0	0,2 6	(m) De	10		wygen: 5,69 wygen: 5,69 wygen: 42,5 Cond: 42,5 ature: 17,5
-	Ö		P	رن ن 0	230	0 2	7	0.3	13	N	Jan.	0	Depth (m)	2		
20	4,1	O F	ن ج ه	12	o'o	2,40	2.0	6	2	8,0	2.0	0.0	(m) De	13		(mg/L) (% sat) (μS/cm) (°C)
	0	Y counties *25 ₀	2	17	_ر ô	94	20	0,5	2	アーの	0,3	0	Depth (m)			Ò

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.1m (unless depth is insufficient); Measurement 13 depth = 0.1m (unless depth is insufficient); Measurement 14 depth = 0.1m (unless depth is insufficient); Measurement 15 depth = 0.1m (unless depth is insufficient); Measurement 16 depth = 0.1m (unless depth is insufficient); Measurement 17 depth = 0.1m (unless depth is insufficient); Measurement 18 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth = 0.1m (unless depth is insufficient); Measurement 19 depth =

	Signed:
86-5-3 WB	Muse Want
000	Date:
Massey on	8/2/07

WBID#	0113
Site#	4

Data Sheet B - Site Characterization

Date & Time: 5/2	1/07 1015	S	Site Location Description (e.g., road crossing):							
	lectors): R. MARIN + J	Forth	ANCHOR 1	PAN						
	nditions: CLEAR	I	Facility Name: (Permit Number:	DUEEN CITY WU	J+F					
Weather Conditions	for Past 10 days: UNKN		ermit Number.	mo 0093785						
Drought Conditions	?: No drought □; Phase I □		ace III 🗍 · Phace ·	IV []. Unknown [A						
	. No drought \square , Thase $1 \square$	i, i iiase ii L., i ii	asc III L, I liasc.	iv Li, Olikilowii 21						
te Locations:	ATES (UNIVERSAL TRANSVERS	SE MERCATOR PRO	JECTION, IN METER	is)						
Site GPS Coordina	ates: UTM X: 05393	75	Y: 44	63691						
	CTION METHOD (Indicate the me	ethod used to determin	ne the locational data)						
	Global Positioning System (G	SPS)		Interpolat	ion					
Static Mode				ohic Map or DRG						
Dynamic Mode (Kine Precise Positioning S			Satellite	notograph or DOQQ						
	Dei vice									
Signal Averaging			Interpola	tion Other						
Real Time Differentia										
HORIZONTAL ACCI	JRACY ESTIMATE GPS Data Quality			Interpolation Da	uta Quality					
FOM	± Meters	3	O							
EPE	± _ 16 _ Feet or ±	Meters	Source	Map Scale: 1:24,000 1:100,						
PDOP	productive and a second	*****		±Feet or ±	Meters					
otos:										
Photo ID# (WBID Site# ##)	Photo Purpose and D (upstream, downstream,		Photo ID# (WBID Site# ##)	· · · · · · · · · · · · · · · · · · ·						
	PSTREAM SITE EL			(upstream, downstream, other)						
0113-4-196 DO	WNSTREAM SITE H	+4 TRANSECT	\$							
es Observed*:	(Uses actually observe	d at time of su	rvev.)							
	☐ Skin diving			☐ Tubing	☐ Water skiing					
☐ Wind surfing	☐ Kayaking	☐ Boatin		☐ Wading	☐ Rafting					
☐ Hunting	☐ Trapping	☐ Fishin	g	None of the above	☐ Other:					
				1.75	Ise Data Sheet D- Recreation					
	conducting interviews.)	<i>O</i> , 1		•						
	_									
ırroundina Con	ditions*: (Mark all that pro	mote or impede recre	ational uses. Attach	photos of evidence or unusual its	ems of interest.)					
☐ City/county par		☐ MDC conser		☐ Urban areas	☐ Campgrounds					
☐ Boating accesse		☐ National for	ests	☐ Nature trails	☐ Stairs/walkway					
☐ No trespass sign		Steep slopes		☐ None of the above	Other:					
		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			I					
Comments:										

WBID#_	0/13	
Site#	W	

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

☐ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock	Watering	□ RV / ATV Tracks	
☐ Camping Sit	tes	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Ta	ackle	☐ Othe	er:
Comments:	2	1 1 0		1 3			
	None						
eam Morpho	ology:						
Upstream Vie	ew's Physical Des	scriptions: Is there	any water present at	this view?	Yes □	l No	
			there an obvious cur			No	
Select one of t	the following cha		mere an obvious eur	ent:	168 L	INO	
Channel Feature			Width (m)	Length (m)	Median D	epth (m)	Max. Depth (m)
RIFFLE							
RUN							
POOL							
Select one of a Channel Feature RIFFLE	the following cha Distance from		lth (m) Length	(m) Med	ian Depth ((m)	Max. Depth (m)
	e Distance from	m access (m) Wid	lth (m) Length	(m) Med	ian Depth ((m)	Max. Depth (m)
RUN							
RUN POOL							
POOL							
POOL bstrate*: (Ti		1 add up to 100%.)					
POOL bstrate*: (Ti		1 add up to 100%.) % Gravel (00)	% Sand	% Silt 40) % Mud/	Clay	% Bedr
POOL bstrate*: (Ti	Cobble - 9	% Gravel (00)	% Sand ralgal growth at the			Clay Clay	% Bedr
POOL bstrate*: (Ti	Cobble - 9	% Gravel (00)				/Clay	% Bedr
bstrate*: (Ti	Cobble - 9	ount of vegetation o				Clay	% Bedr
bstrate*: (Ti	ation*: (Note amo	ount of vegetation of the state					% Bedr
bstrate*: (Ti - %C uatic Vegeta //me ater Characte	ation*: (Note amo	ount of vegetation of all that apply.)	r algal growth at the a	assessment site	.)	er:	**Bedr
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR:	ation*: (Note amo	ount of vegetation of all that apply.) Sewage	r algal growth at the a	None	Othe	er:	*Bedr
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR: COLOR: BOTTOM DEP	ation*: (Note amo	ount of vegetation of all that apply.) Sewage Clear Sludge	r algal growth at the a	None	Othe	er: er:	% Bedr
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR: COLOR: BOTTOM DEP WATER SURF	ation*: (Note amore eristics*: (Mark and	ount of vegetation of all that apply.) Sewage Clear Sludge	r algal growth at the a Musky	None Milky ents None	Othe	er: er:	% Bedr
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR: COLOR: BOTTOM DEP WATER SURF	ation*: (Note amore eristics*: (Mark and	ount of vegetation of all that apply.) Sewage Clear Sludge	r algal growth at the a Musky	None Milky ents None	Othe	er: er:	% Bedr
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR: COLOR: BOTTOM DEP WATER SURF mments: Ple his information:	ation*: (Note amore eristics*: (Mark and action): COSIT: CACE DEPOSITION: Case attach any addising to be used solution.	ount of vegetation of all that apply.) Sewage Sludge Oil ditional comments the sely for removal of a resource of the series	r algal growth at the a Musky	None Milky	Othe	er: er: er:	
bstrate*: (T) - % C uatic Vegeta ter Characte ODOR: COLOR: BOTTOM DEP WATER SURF mments: Ple iis information in	eristics*: (Mark and acceptance) COSIT: CACE DEPOSITION: Case attach any addisposed to be used solderstanding of water	ount of vegetation of all that apply.) Sewage Sludge Oil ditional comments the ely for removal of a reconditions. Consequence of the consequen	Musky	None Milky	Othe Othe Othe Othe othe	er: er: er: eriner:	e e e a
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Feature Type (riffle, run, or pool)	12	<u>-1</u>	10	9	æ	7	o o	ر ت	4	ယ	2		Measurement									
2000-	£ 2	in		2.5	1. N	2.0	ت	Ē		o o	2.0	0.2.0	Distance (m)	2		Field	Average Stream vylotn:	>	[Estimated Channel Incision: 1/2	Waterbody ID: 0/12	
222	0,0	3	0	0.2	0.3	0,2	0:2	2	0,2	5	0 - 1	0.1	Depth (m)			Field Staff:	Stream		TM X: _	ed Chan	ody ID:	
C.	2,5	2	23.00	10 10	1.75	S	1.25	ð	0.15	9	9,35	0,0	Distance (m)	02		QENE	i vvidini	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UTM X: 0539375 Horizontal Accuracy Esti	nel Inci	0 = 0	
Z	0,0	3	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\$	7	70.	<0,1	P	1:07	61	20.	0,0	Depth (m)			a	0.0	N	7375	sion:		
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E.,	0,0	7.07	20.1	-		<u></u>		70,1	C0,1	1.07	0116	0,0	Depth (m)			Ź			UTM Y: _ (GPS Da	m) (heig	Site #: _	
Rool	4.5 1	N N	00 m	土が	3)	9	2.2	.w	1	0.0	e. 0	0,2	Distance (m) D	04		Q.		ì	JTM X: 0539375 UTM Y: 4463. Horizontal Accuracy Estimate (GPS Data Quality):	(m) (height between low bank width and water)	WIBID ST-4	
30	0	-	0:-	0,7	9 7	12,	2	2,2	0,0	4	000	0	Depth (m)			JUSTYN	(Sieres)		446369/ a Quality): +/-	een low	千	
Run	2	270	÷0	1.6	-	رم	ð	44 O	0	2,0	0.2	Ö	Distance (m) D	05		É	20x avera	- - - - - - -		bank w		
~	o o	18/11/12	701/		~	20,2	0,2	0.2	012	0,1	1.07	0,0	Depth (m)		Transe	あま	age strea	2	6	idth and		
287	63	10	4.45	亡 ()	3,55	\(\frac{1}{2}\)	2,65	2,2	in	is	0,85	9.4	(m) D	06	ct Cro		(20x average stream width)		(feet)	water)		
	9.9	4.0	+ 3	4.	2.0	5.6	0,4	24	7.0	- -	0,2	3.	Depth (m)	1	Transect Cross-Section							
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	0,0	2	0 1	0,1	0.	011	1.0	0.1	10,2 c	0,2	0.26	0:10	Depth (m)					3				
Ruspuk	بر ا ا	2.5 1	2.25 /	200	1.75 /	is a	1.25	0	7 54.0	0.8	0,25 1	0,00	(m) De	8			(Hetels)	<u> </u>			o	
R	000	10.1	10,1	2 1:07	10,1 2	10.1 2	6,0 2	0,0	6,1	110	0 1:02	0,0	Depth (m)	2			Water T	ş	Dissol	Dissol	Date:	
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	0	0.	0:-	0,23	0.22	0,2 2	0,2 2	0.2		_		0.1	Depth (m)	2	and the		Water Temperature: 18.0	ond:	Dissolved Oxygen: 57,	1	121/07/	issolve
	一十十	ے ج	0 14 10	is	a.	2.5 0.	21 0	- L	0	6 D	0,5 0,1	b/1 b	(m) Dep	10			00	Specific Cond: 4/4/5 (µS/cm)	407	N W W	貫	Dissolved Oxygen
Ç.,	0 5,	<u></u>	Ç.5	ے د د	<i>\$</i>	Ö	رن 0 2	O	0 - 2	-	110		Depth (m) (3	-		(°C)	E S	(%	ි(mg/L)	Time:	gen
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	Ò	orting.	r.	?	7	w	i,	W	W	73	N		Depth (m)								age .	

Notes: Transects will be measured beginning on left descending bank and finishing on light descending bank.

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as <1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

250 5-73-07 MAS/24/07

WBID#_	0113
Site#	Core.

Date & Time:	5/21	107 111	10	Sit	te Locati	on Desc	ription (e.g., road crossing):				
Personnel (Data		1		7 6	COUNT	4 120	0AYO 58				
Current Weather	Conditions	4		Facility Name: QUEEN CITY WWTF							
		Utar		Permit Number: MO 0693785							
Weather Conditi	ons for Past	10 days:	WV								
Drought Conditi	ons?: No dr	ought 🗆; Phase I 🗆	l; Phase II □	l; Phas	se III □;	Phase 1	[V □; Unknown 🏻				
te Locations:							,				
		IVERSAL TRANSVERS	E MERCATOR	PROJE	ECTION, II	N METER	S)				
Site GPS Coor	dinates: U7	MX: 05407	68		Y	: 4	461330				
·		ETHOD (Indicate the me	F	etermine	the locati)				
	Global f	Positioning System (G	PS)				Interpolat	ion			
Static Mode Dynamic Mode (Vinomatia)			\ \			ohic Map or DRG otograph or DOQQ		+		
Precise Position						Satellite I			\rightarrow		
Signal Averaging				\rightarrow	/		tion Other		\nearrow		
Real Time Differ		oisa		+/	\leftarrow \vdash	nterpola					
HORIZONTAL A				1/	\perp						
HORIZONTALA		GPS Data Quality				No. 10	Interpolation Da	ta Quality			
FOM	±	Meters	To the field on the english of				<u> </u>				
EPE		IB Feet or ±		·		Source	Map Scale: 1:24,000 1:100,				
PDOP		***************************************					±Feet or ±	Meters			
h <u>otos:</u>					·			·			
Photo ID# (WBID_Site#_##)	i	Photo Purpose and D (upstream, downstream,			Photo (WBID_S			se and Direction ownstream, other)			
0113_5_197	UPSTREAM	N SITE #5 H	ransect th	- 4000							
b113-5-198	DOWNSTE	BAM SITE #5	, TTRANSE	スサリ							
							1				
s <u>es Observe</u>	d*: (Uses a	actually observe	d at time o	f surv	vey.)						
☐ Swimming		☐ Skin diving	□s	CUBA	diving		☐ Tubing	☐ Water skiii	ng		
☐ Wind surfing	5	☐ Kayaking	□в	Soating			☐ Wading	☐ Rafting			
☐ Hunting		☐ Trapping	□F	ishing			None of the above	☐ Other:			
		of individuals recreati ring interviews.)	ng, photo-do	cument	tation of	evidence	e of recreational uses, etc. U	se Data Sheet D- F	Recreational		
urroundina C	ondition	S*: (Mark all that pror	note or impede	recreati	ional uses	. Attach r	photos of evidence or unusual ite	ems of interest.)			
☐ City/county		☐ Playgrounds	☐ MDC co				☐ Urban areas	☐ Campgrou	nds		
☐ Boating acc	☐ State parks	☐ Nationa	al fores	sts	☐ Nature trails ☐ Stairs/walkw			cway			
☐ No trespass	sign	☐ Fence	Steep s	lopes			None of the above	☐ Other:			
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1 1 -			·	'//				

WBID#	0113
Sita# _	5

Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock \	Watering F	RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Ta	ckle 🗆 (Other:
Comments:						
No	10					
am Morpholo	oav:					
		eriptions: Is there	any water present at t	this view?	Yes □ No	
		-	s there an obvious curr			
	following char	inel features:				
Channel Feature	Transect (#) Distance from access (m)	n Width (m)	Length (m)	Median Depth (m) Max. Depth (m)
RIFFLE						
RUN						
OOL						
la vana en						NT.
ownstream Vi	ew's Pnysical L	-	nere any water present			
alost one of the	e following char		, is there an obvious cu	irrent? L	□ Yes □ 1	NO
Channel Feature	Distance from		dth (m) Length	(m) Med	ian Depth (m)	Max. Depth (m)
RIFFLE						
RUN						
POOL				7.5		
		add up to 100%.)				
ostrate*: (The		add up to 100%.) Gravel $\mathcal{G}\mathcal{V}$	% Sand	% Silt 30) % Mud/Clay	% Bedrock
Cob	ble %	6 Gravel 90	% Sand or algal growth at the a			% Bedrock
watic Vegetati	ble %	6 Gravel 90	<u></u>			% Bedrock
% Cob µatic Vegetati Non €	on*: (Note amo	unt of vegetation	<u></u>			% Bedrock
watic Vegetati Non € ter Character	ble %	unt of vegetation all that apply.)	or algal growth at the a	assessment site	.)	% Bedrock
wer Character	on*: (Note amo	unt of vegetation all that apply.)	<u></u>	assessment site	.) Other:	% Bedrock
wer Character	on*: (Note amo	unt of vegetation all that apply.)	or algal growth at the a	assessment site	.) Other:	% Bedrock
atic Vegetati None er Character DDOR: COLOR:	on*: (Note amo	all that apply.) Sewage	or algal growth at the a	nssessment site	.) Other:	% Bedrock
wer Character ODOR: COLOR: BOTTOM DEPOS	on*: (Note amo istics*: (Mark a	all that apply.) Sewage Clear Sludge	or algal growth at the a	nssessment site	Other:	% Bedrock
ter Character ODOR: COLOR: BOTTOM DEPOS	on*: (Note amo istics*: (Mark a	unt of vegetation of all that apply.) Sewage Clear Sludge Oil	or algal growth at the a Musky	None Milky Ments None	Other:	% Bedrock
ter Character ODOR: COLOR: BOTTOM DEPOS	on*: (Note amo istics*: (Mark a	all that apply.) Sewage Clear Sludge	or algal growth at the a Musky	None Milky Ments None	Other:	% Bedrock
water Surfacements: Please is information is:	on*: (Note amo istics*: (Mark a	unt of vegetation of all that apply.) Sewage Clear Sludge Oil ditional comments ely for removal of a	or algal growth at the a Musky	None Milky	Other: Other: Other: Other:	more
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water Surface wa	on*: (Note amo istics*: (Mark a SIT: CE DEPOSITION: se attach any add not to be used sole standing of water ation use analysis	all that apply.) Sewage Clear Oil ditional comments ely for removal of a conditions. Consecutive but may point to consecutive for the condition of the cond	or algal growth at the and algal growth at the algal growth at the algal growth at the algal growth at the and algal growth at the algal growth at the and algal growth at the and algal growth at the and algal growth at the	None None None None	Other: Other: Other: Other:	more uence a
water Surface wa	on*: (Note amo istics*: (Mark a sit: EE DEPOSITION: se attach any add not to be used sole standing of water ation use analysis vou have comp	all that apply.) Sewage Clear Oil ditional comments ely for removal of a conditions. Consection of the contents letted all sections.	or algal growth at the and algal growth at the	None None None None	Other: Other: Other: Other: other: ato provide a red directly influe affect another.	nore uence a r use. ng is complete.
watic Vegetati Vegetati Vegetati Vegetati Vegetati Vegetati Vegetati Vegetati Color: Color: BOTTOM DEPOS WATER SURFAC mments: Please is information is apprehensive under sion on the recreates ase verify that	on*: (Note amo istics*: (Mark a sit: EE DEPOSITION: se attach any add not to be used sole standing of water ation use analysis vou have comp	all that apply.) Sewage Clear Oil ditional comments ely for removal of a conditions. Consection of the contents letted all sections.	or algal growth at the and algal growth at the	None None None None	Other: Other: Other: Other: other: ato provide a red directly influe affect another.	nore uence a r use. ng is complete.
weyor's Signatu	on*: (Note amo istics*: (Mark a sit: EE DEPOSITION: se attach any add not to be used sole standing of water ation use analysis vou have comp	all that apply.) Sewage Clear Oil ditional comments ely for removal of a conditions. Consection of the contents letted all sections.	or algal growth at the and algal growth at the	None None None None	Other: Other: Other: Other: other: ato provide a red directly influe affect another.	nore uence a r use. ng is complete.
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Common	Feature Type (riffle run, or pool)	12	-	10	9	~								Measurement									
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Site #	Pa	54	3	J W	いい	<u>ςα</u> જ	ω Ĉ2		2,3		ļ	8	0,3		.0		PENE	n Width		tal Accu	nnel Inc	0112	
Complete	ď	Č	0,1	Ç4	.65.	Ç	cv		S		~	6		Depth (m)	2				Park .	racy Es	!		
Date:	Poo	4,5	-	TI CO		でんり	N	2.1		<u> </u>	0,0	3			0.		写る	U		کر ا). ر timate (10		
Date:		0	0			12	3			, L	5	É	de-				*			JTM Y: _ GPS Da	(m) (hei		
Date:			10000	5	£-	6	pydyddaw	5	5	6_	-				2		000	(m		U Y V Ita Qual	ght betw	WRID S	;
Date: 52.107 Time: [[] Dissolved Oxygen: 7,98 (mg/L) Specific Cond: 369,9 (µS/cm) Specific Co		ò	,		ar artisas	, marriage , marriage	ctur hvioptur	one president	2.	15°	-10 -200a	4.09 .natur	PEL Juddinista				25	_ '		0,0	een low	the#)	
Date: 52.107 Time: [[] Dissolved Oxygen: 7,98 (mg/L) Specific Cond: 369,9 (µS/cm) Specific Co	AND COMMON TO SERVICE AND ADDRESS OF THE PARTY OF THE PAR	ļ		<u> </u>		5	2_	w	47				S		05		101	Lengtr 20x aver		'	/ bank w		
Date: 52.107 Time: [[] Dissolved Oxygen: 7,98 (mg/L) Specific Cond: 369,9 (µS/cm) Specific Co	<u> </u>		or analysis	in	rs.	(Care			-Ę.,	ļ	<i>3</i> 3.	69	dinanga			Transe	igned and the second	n of Sun age strea	;	20	idth and		
Date: 52107 Time: [[] Dissolved Oxygen: 7, 98 (mg/L) Dissolved Oxygen: 7, 98 (mg/L) Specific Cond: 369,9 (µS/cm) Specific	2	M	ļ	i –	_0		-				2	*	ÇM		06	ct Cro		vey Seg ım width))	(feet)	d water)		
Date: 5/2/107 Time: 111 Dissolved Oxygen: 7,98 (mg/L) Dissolved Oxygen: 7,98 (mg/L) Specific Cond: 3679 (µS/cm) Specific Cond: 3679 (µS/cm) Depth (m) (m) (m) (m) (m) (m) (m) (m) (m) Depth (m) (m) (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) (m) Distance (m) (m) (m) (m) (m) (m) (m) (m) (m) Distance (m)	N	Ö	AND SECTION ASSESSMENT OF THE PERSON ASSESSMEN	-1000	etic etics _b	-copide	aringy.	ar ,mang		,0000	-50 p2004,	Ç4	rivise			ss-Sec		ment:_					
Date:		85°	in		Co	A	-	 	2	Bo.	V		Š		07	tion		d)				
Date: 5/2/107 Time: 1/1 Dissolved Oxygen: 7, 78 (mg/L) Dissolved Oxygen: 84, 8 (% sat) Specific Cond: 367, 7 (µS/cm) Specific Cond: 367, 7 (µS/cm) Specific Cond: 367, 7 (µS/cm) Dissonce Cond: 367, 7 (µS/cm) Dis	Z.	ļ	<u> </u>	-		-800000			12000004	ļ	<u> </u>	1						(me					
Solved Oxygen: 7, 98 (mg/L) Specific Cond: 3699 (wsat) Specific Cond: 3699 (wsat) Specific Cond: 3699 (wsat) Distance (m) Distance (m) (m) (m) Distance (m) (m) Distance (m) (m) 2.45 20.1 1.25 20.1 1.2 2.14 20.1 1.25 20.1 1.2 2.14 20.1 1.25 20.1 1.2 2.14 20.1 1.25 20.1 2.8 2.14 20.1 1.25 20.1 2.8 2.14 20.1 2.25 20.1 4.4 3.15 20.1 2.25 20.1 4.8 3.15 20.1 2.25 20.1 4.8 3.17 20.0 3.5 20.0 5.5 Revived Oxygen: 7, 98 (mg/L)	RUN	<u> </u>	5	Ì	7	~		<u> </u>	I	<u> </u>	ļ	ļ	ļ		08							D	
Time: 111 2, 98 (mg/L) 369,9 (µS/cm) 369,9 (µS/cm) 10 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,75		Ö	ļ	 	 	 			-	+	100		- 3		2			Water T	Sp	Dissolv	Dissolv	ate:	
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GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Signed: Marc 5-23-07 Magrif

WBID#_	0113
Site#	10

Date & Time:	-/2./2.7	1200	***************************************	Site Le	ocation Desc	cription (e.g., road crossing):				
		1200			T PWH					
Personnel (Data Col	iectors): Z. N	MOTINAJ.	FOTH	· ·						
Current Weather Co	nditions:	lear		Permit Number: MO 0093185						
Weather Conditions		<u> </u>	wn							
Drought Conditions	?: No drought			: Phase II	☐: Phase	IV □; Unknown 🎉				
	Ito arough	, 1 11000 1 mm	, 11100011	, 111130 11	, 11100	, emaio <u>pa</u>				
Locations:	ATES /I INIVEDS	CAL TRANSVERSE	= MEDCATOR	PPO IECTIO	N IN METER	8				
Site GPS Coordin				INCOLOTI		458904				
HORIZONTAL COLLE				termine the l	ν					
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Signal Averaging				$\overline{}$		tion Other				
Real Time Differenti	al Processing									
HORIZONTAL ACC		MATE		V						
	GPS	Data Quality				Interpolation Dat	a Quality			
FOM		Meters			Source	Map Scale: 1:24,000 1:100,0	000 Other			
EPE	±_3/_	_Feet or ±	Meters			±Feet or ±	Meters			
PDOP		zárzáráfzásásáró.				±1 ccc or ±_	Wotors			
otos:										
Photo ID#		Purpose and Di			hoto ID#	Photo Purpos	se and Direction			
(WBID_Site#_##) OUB_6-199 UK		pstream, downstream, of			BID_Site#_##)	(upstream, do	ownstream, other)			
3 113-6-200 DE	TWAL GRODA	M SITE \$6	TRANSECT	#1						
	> 1 4 (3 (E))									
es Observed*:	Alsos actua	ally observed	l at time of	fenryay	`					
			1	······································	<u> </u>					
☐ Swimming		Skin diving		CUBA div	ing	☐ Tubing	☐ Water skiing			
☐ Wind surfing	[[Kayaking	□ B ₁	oating		□ Wading	☐ Rafting			
☐ Hunting		Trapping	☐ Fi	shing		None of the above	☐ Other:			
			ng, photo-doc	umentatio	n of evidence	of recreational uses, etc. Us	se Data Sheet D- Recreational			
Use Interview when	conducting in	iterviews.)								
rounding Con	ditions*:	Mark all that prom	ote or impede	recreational	uses. Attach	photos of evidence or unusual ite:	ms of interest.)			
☐ City/county par		Playgrounds	☐ MDC co		***************************************	☐ Urban areas	☐ Campgrounds			
☐ Boating accesse		State parks	☐ Nationa	l forests		□ Nature trails □ Stairs/walk				
☐ No trespass sign		Fence	Steep sl			☐ None of the above	Other:			
- INV HESDASS SIRII		1 01100	ارو ماند کت	opes		i rone of the above	ر Omer.			
<u> </u>			/			1	7			
Comments:	- Month Michigan	run gun	<i>/</i>				· ·			

WBID#_	0113
Site#	I.A

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

	Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock	Watering	□ RV	ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharg	e	ickle	☐ Othe	er:
Comments:							······
	Nov	10					
	/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
eam Morpholog	gy:						
		criptions: Is there	any water present at	this view?	Yes [] No	
	√	•	there an obvious cu			l No	
Select one of the	fallowing cha		mere an obvious cu	ITCHU! L	ics L	1 100	
Channel Feature	Transect (#) Distance from	Width (m)	Length (m)	Median I	Depth (m)	Max. Depth (m
RIFFLE		access (m)					
RUN							
POOL							
FOOL					··		
ownstream Vie	w's Physical I	Descriptions: Is the	re any water presen	t at this view?	□ Yes	□ No	
	•						
N-14 £41	6-n		s there an obvious	current?	□ Yes	□ No	
Select one of the : Channel Feature	Distance from		th (m) Lengtl	(m) Mod	ian Depth	(m)	May Donth (m
RIFFLE	Distance noi	II access (III) With	in (iii) Lengu	r (III) Med	тап Берш	(111)	Max. Depth (m
RUN							
POOL							
			I and the second second second				
ostrate*: (These	e values should	d add up to 100%.)					
<u>,</u>	·····	% Gravel 70	% Sand	% Silt \\ \alpha 8	% Mud	l/Clay	% Bed
→ % Cobbl				1			
	_		algal groupth at the	accecement cite	.)		
uatic Vegetatio	n*: (Note amo	ount of vegetation or	algai growth at the	assessificiti site	· <i>y</i>		
uatic Vegetatio			Alfai growth at the	assessment site	.,		
uatic Vegetatio		bunt of vegetation or builday in re	He	assessment site	·-)		
uatic Vegetatio	Wes when	bridge in ry	He	assessment site			***************************************
uatic Vegetatio Algae en vo	Wes when	bridge in regall that apply.)	Musky Chemical		□ Oth	ner:	
uatic Vegetatio Agae an vo ter Characteris	Wes when	hidae in ra all that apply.)	Musky Chemical	None	☐ Oth		
uatic Vegetatio Agae on vo ter Characteris ODOR:	rles under stics*: (Mark	all that apply.) Sewage	Musky	None □ Milky	☐ Oth	er:	
uatic Vegetatio Agae on vo ter Characteris ODOR: COLOR: BOTTOM DEPOSIT	rles under stics*: (Mark	all that apply.) Sewage Clear Sludge	Musky	None Milky ments None	☐ Oth	er: ner:	
uatic Vegetatio Mgae m vo ter Characteris ODOR: COLOR:	rles under stics*: (Mark	all that apply.) Sewage Clear Sludge	Musky	None □ Milky	☐ Oth	er: ner:	
uatic Vegetatio Agae on vo ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE	stics*: (Mark T: E DEPOSITION:	all that apply.) Sewage Clear Sludge Oil	Musky	None Milky ments None	☐ Oth	er: ner:	
uatic Vegetatio Agae on vo ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE	stics*: (Mark T: E DEPOSITION:	all that apply.) Sewage Clear Sludge	Musky	None Milky ments None	☐ Oth	er: ner:	
uatic Vegetatio Mgae on vo ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE mments: Please	stics*: (Mark T: E DEPOSITION: e attach any add	all that apply.) Sewage Clear Sludge Oil	Musky	None Milky ments None None	☐ Oth ☐ Oth ☐ Oth ☐ Oth	er: ner:	3
uatic Vegetatio Myne of volume of v	stics*: (Mark T: E DEPOSITION: e attach any ado to be used sol tanding of water	all that apply.) Sewage Clear Sludge Oil ditional comments to ely for removal of a reconditions. Conseque	Musky	None Milky ments None None ation but rather is	Oth Oth Oth Oth to provide to directly	er: ner: ner: de a more	ce a
uatic Vegetatio Myne of volume of v	stics*: (Mark T: E DEPOSITION: e attach any ado to be used sol tanding of water	all that apply.) Sewage Clear Sludge Oil ditional comments to	Musky	None Milky ments None None ation but rather is a is not intended t	Oth Oth Oth Oth to provide to directly	er: ner: ner: de a more	ce a
uatic Vegetatio Agae or vo ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE mments: Please is information is no uprehensive underst ision on the recreati	stics*: (Mark T: E DEPOSITION: e attach any ado to be used sol tanding of water ion use analysis	all that apply.) Sewage Clear Sludge Oil ditional comments to ely for removal of a reconditions. Conseque but may point to conditional comments.	Musky	None Milky ments None None None ation but rather is in is not intended the image of t	Oth Oth Oth Oth ato provide affect an	er: ner: de a more r influence other use	ce a e.
ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE mments: Please is information is no aprehensive underst ision on the recreati	stics*: (Mark T: E DEPOSITION: e attach any add to to be used sol tanding of water ion use analysis ou have comp	all that apply.) Sewage Clear Sludge Oil ditional comments to ely for removal of a reconditions. Conseque but may point to conducted all sections. cleted all sections. cl	Musky	None Milky ments None None None ation but rather is in is not intended the analysis or that	Oth Oth Oth Oth to provide affect an	er: ner: de a more influence other use	ce a e.
ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE mments: Please is information is no aprehensive underst ision on the recreati	stics*: (Mark T: E DEPOSITION: e attach any add to to be used sol tanding of water ion use analysis ou have comp	all that apply.) Sewage Clear Sludge Oil ditional comments to ely for removal of a reconditions. Conseque but may point to conducted all sections. cleted all sections. cl	Musky	None Milky ments None None None ation but rather is in is not intended the analysis or that	Oth Oth Oth Oth to provide affect an	er: ner: de a more influence other use	ce a e.
ter Characteris ODOR: COLOR: BOTTOM DEPOSIT WATER SURFACE mments: Please is information is no prehensive underst sion on the recreati	stics*: (Mark T: E DEPOSITION: e attach any add to to be used sol tanding of water ion use analysis ou have comp	all that apply.) Sewage Clear Sludge Oil ditional comments to ely for removal of a reconditions. Conseque but may point to conditional comments.	Musky	None Milky ments None None None ation but rather is in is not intended the analysis or that	Oth Oth Oth Oth to provide affect an	er: ner: de a more influence other use	ce a e.

Feature Type (riffle, run, or pool)	12	<u>-</u>	10	9	80	~!	6	5	4	ယ	2		Measurement										
		Q Ŝ	12 12	2.4	27	- - - - -	-	う	_ O O	0,0	o is	0,0	Distance (m)	2		Field	Average		GPS Lo	Estimat	אַעמנמיַ	Waterhody ID:	1
D. Frik	0	20.1	7.0:1	Ð, ð	011	0,2	20,1	0,1	1.07	0.0	2011	0.0	Depth (m)			Field Staff:	e Strean	1011201	ocation (ed Char	ر ار:	<u>}</u>	
Rool	12,6	2	10,9	رب د	Q 00	かい	6.1	4.9	4,5	2.5	3	0,1	Distance (m) [02		RENE	Average Stream Width:	Holizolital Accorded Familiate (Of O pata wearry).	GPS Location (taken at transect 1): UTM X: 0 5 4 / 80 / Harizontal Acquiracy Estima	Estimated Channel Incision:		<u> </u>	
	0.0	~	6	0.12	<u>7</u> 8	200	>10	71.04	71.0	3,5	0,2	0,1	Depth (m)			PENER MARTIN	a	iacy La	transec	sion:			
E S	1114	Processor Professor In Engagence	0	(D)	Q0	4.0	9.0	4.5	i L	n in	P	0,1	Distance (m)	03		2	,	illiate (c	t1): ∪:	Γ	,	'n	
	0.0	0, 1	<i>D</i>	2. 0	<i>S</i>	7,0	7:0	12 12 12	-3 -3 -6	0	4.0	<u>~</u>	Depth (m)			P		ָ כַּ	OTM Y:	m) (heig		Sito #	
RUN	6.7 0.	€ €	14 15	<u>-</u>	O T T	ζ ζ ζ ζ	رن رن	-4-3	P3	'n	019	0.3	Distance (m) De	04		JUSTYZ	(me	5	STA	(m) (height between low bank width and water)	(WBID_Site#)	びごい	
2	10 5,	0, / 5	9,3	0,3 4,5	1	W	W 3	e u	2 2	0112,	0 - -	-	Depth (m)				(meters)		7458904	en low	e#	2_	
Pool	~Q	47	W	Š	o TiV	- 2	4	υ. υ.ο	2.9	S O	20	9	Distance (m) De	05		ا ا	Length of Survey Seg		en L	bank wi			
20	0,0 4,	ر ا ا	0.3	Party Services	0.4 2.	7 2.0	2	0,2	2	Č O	0.	-4000	Depth (m)		ranse		of Surv	-	`	dth and			
202	0	Ö	<u>e</u>	32 1	00	ドド	200	e	2	Ç0	7	0	Distance (m) De	06	ct Cros		Length of Survey Segment:	(1001)	foot)	water)			
	0,0 4,	0	2.1.2.	20,1 2,	20.1 2	20.1 2	-	-	0/	0,	0.10	0,0	Depth (m)		Transect Cross-Section		1						
Row	4	12	0.0	0	W	2,00,2	7	0	0	CO	0 0	120,1	(m) Dep	07	on		160						
	00 45	0,14,3	- س 2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0. 3.1	2 2.7	0.2 2.3	2:10	12 1.5	012 1.1	0,20,7		Depth (m) (?			(meters)				-		
Book	õ	<i>∞</i>	0-0-	0 0	0,3	2000	30,5	2015	5.0	013	 	0.3	(m) Depth (m)	80			10				[5	Date:	
-	ν, 0	2.	(n)	5	(N)	1.7	5.1.5	5 1.3	5	0	0,20,7	_	h (m) (m)	2			/ater Te	Spe	Dissolve	Dissolve	[
23	0.0	<i>a o o</i>	G CO	0	0	7	0/	3	0,	مت چ	0	G (3)	1) Depth (m)	09		-	Water Temperature:	cific Co	Dissolved Oxygen: 99, 5	Dissolved Oxygen: 7// 8		707	Dis
<u> </u>	7.4	二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二二	1.26	1.12	0.98	1200	0,7	0.86	0.42	0.28	0	0.0	(m) (m)	2		1	 	<i>M</i> 	en:	en:	 S	٠	solved
acrie	0,0	120:1	6 70	Ö	<u>a</u>	2	0	601	12011	0,2	10/2	0 0 0	Depth (m)	10			7,6	Specific Cond: 377.5	12	118	_ 	Time:	Dissolved Oxygen
Z	3, 2	3,4	27,4	T N	17	, -		1.2	0 .0	0,6	0.3	0.0	(m) (m)	2			(ိုင်	μS/cm)	(% sat)	(mg/L)	-		5
	0,0	40-	0	0	No.	2	C	5		20,1	20,7	ō	Depth (m)	=				m)	at)	1)	79,000	700	

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as <1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetled width distance and depth = 0m.

Signed: // /////// Onc 5-23-07 Ales 12467

WBID#_	0113
Site#	7

Data Sheet B - Site Characterization

		a g								
Date	& Time: 5/21	107 12	56 <u> </u>	Site L	ocation Desc	cription (e.g., road crossing):				
Perso	onnel (Data Collec	tors): P. WARTH ! J.	. GoTH		1 PTUU	,				
Curre	ent Weather Condi	tions:		Facility Name: QUEEN CITY WWTF Permit Number: MO 0093785						
Weat	ther Conditions for		LAWIN							
Drou	ght Conditions?: 1	No drought □; Phase I □	l; Phase II □	; Phase II	I □; Phase	IV □; Unknown 🏿				
Sitolo	cations:					,				
		S (UNIVERSAL TRANSVERS	SE MERCATOR	PROJECTI	ON, IN METER	(S)				
Site	GPS Coordinate	s: UTM X: 0543	,967		Y: 40	456549				
HOR		ON METHOD (Indicate the me		termine the	locational data					
Statio	GI c Mode	obal Positioning System (G	iPS)		Topogram	Interpolati ohic Map or DRG	on Maria de la Companya de la Compa			
	amic Mode (Kinema	atic)		1		otograph or DOQQ				
	ise Positioning Ser				Satellite					
Signa	al Averaging			X	Interpola	tion Other				
Real	Time Differential P	rocessing								
HOR	IZONTAL ACCUR	ACY ESTIMATE								
11,1171.		GPS Data Quality				Interpolation Dat	a Quality			
FOM		±Meters			Source	Map Scale: 1:24,000 1:100,	000 Other			
EPE		± 23 Feet or ±	Meters			±Feet or ±	Meters			
PDO	Р					*****				
Photos	: :									
Pho	oto ID#	Photo Purpose and D			Photo ID#		se and Direction			
	1D Site# ##) -7-1201 UPST	(upstream, downstream, or SITEMT 7			VBID_Site#_##)	(upstream, do	ownstream, other)			
1113	-7.202 DON	INSTREAM SITE #	t TRANSECT	-#1						
0										
Uses O)bserved*: (I)	ses actually observe	d at time of	f survev)					
	Swimming	☐ Skin diving		CUBA div		☐ Tubing	☐ Water skiing			
	Vind surfing	☐ Kayaking		oating		☐ Wading	☐ Rafting			
	Hunting	☐ Trapping		ishing		None of the above Other:				
			ng, photo-doc	cumentatio	n of evidence	e of recreational uses, etc. Us	se Data Sheet D- Recreational			
Use.	Interview when co	nducting interviews.)								
Surrou	ınding Condi	tions*: (Mark all that pror	note or impede	recreationa	l uses. Attach ¡	photos of evidence or unusual ite	ms of interest.)			
	City/county parks	☐ Playgrounds	☐ MDC co	nservation	n lands	☐ Urban areas	☐ Campgrounds			
	Boating accesses	☐ State parks	☐ Nationa	l forests		☐ Nature trails ☐ Stairs/walky				
	No trespass sign	☐ Fence	Steep sl	opes		☐ None of the above	Other:			
Com	nments:		e							
	HA ME	435								

WBID#	0113
Site#	7

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

ndications of Hun	nan Use*: (a	ttach photo	s)						
☐ Roads ☐	Rope swings	☐ Foot path	ns/prints	☐ Dock/platfor	rm	☐ Livestoc	k Watering	□RV	/ ATV Tracks
☐ Camping Sites		☐ Fire pit/ri	ng	☐ NPDES Disc	charge	☐ Fishing	Tackle	☐ Oth	er:
Comments:	ne							1	
tream Morpholog	ly:								
Upstream View's	Physical Des		If so, is tl	ny water prese here an obviou] No No	
Select one of the 1	following cha Transect (#		es: nce from	Width (m)	T	on ath (as)	Median L	lanth (m)	Mov. Dooth (co.)
Chainer readure	Transect (7		ess (m)	widii (iii)	15	ength (m)	Wiedian	epui (iii)	Max. Depth (m)
RIFFLE									
RUN				-				, , ,	
POOL									
Channel Feature	following cha Distance from		es: Width	n (m) L	ength (m)) M	edian Depth	(m)	Max. Depth (m)
Channel Feature RIFFLE	Distance from	n access (m)	Width	n (m) L	ength (m)) M	edian Depth	(m)	Max. Depth (m)
RUN									
POOL			- 10						
ubstrate*: (These	values should	l add up to 1	00%.)			 			
% Cobbl		% Gravel		% Sand	9	% Silt 5	70 % Mud	/Clay	% Bedro
quatic Vegetatio	n*: (Note amo	unt of veget	ation or	algal grouth at	t the acc	acement ci	to)		
None	iii (ivote and	ount of veget	auon or	argar growth a	t the assi	cssilicit si			
/ater Characteris	tics*: (Mark	all that apply	z.)						
ODOR:				Musky 🗆 Cher	nical	None	e 🗆 Oth	er:	
COLOR:		Clear		Green 🗆 Gray	T	☐ Mill	ky 🗆 Othe	er:	
BOTTOM DEPOSIT	Γ:	☐ Sludge		Solids Fine	sediments	s 🗆 None	e 🗆 Oth	er:	
WATER SURFACE	DEPOSITION:	□ Oil		Scum 🗆 Foan	n	/\(\sqrt{\con}\) Non	e 🗆 Oth	er:	
'ammarta. Di		1:4: 1		41.'- C					
comments: Please	attach any add	iitionai comi	ments to	this form.					
This information is no omprehensive understace ecision on the recreation	anding of water	conditions. (Conseque	ntly, this inform	ation is r	not intended	d to directly	influenc	ce a
lease verify that yo	ou have comp	leted all sec	tions, ch				/	_	is complete.
urveyor's Signature	:///www	Mad	- Page	Position: <u>E</u>	ate of S	urvey:	5/216	7	
Organization: <u>AE</u>	Solvillo	TWS		Position: <u>E</u>	W. S	PECIA	List		
		Mu. C	·9***	- 2 - 0		4			

run, or pool)	12 Feature Type (riffle.	11	10	9	00	7	ത	O 1	4	ω	2	_	Measurement									
	7-6	7.5	St.9	6.0	5,25	H.S	37,75	Ω √2	2,25	-01	24.0	0.0	Distance (m)	01		Field	Averag			GPS Lo	Π ctimo	Waterbody ID:
s will be measu	0.0	0.	0:2	0,3	0,3	0.4	0.5	0.5	0,6	0-4	0,3	0,[Depth (m)			Field Staff:	e Strear		UTM X: Horizon	cation (ed Char	ody ID:
Transects will be measured beginning on left descending bank and finishing on right descending bank.	133	60	エー	6,6	ç0	0	4.2	3.4	2.6	<u>ca</u>	0.0	02	Distance (m)	02		RENEE	Average Stream Width:		JTM X: 9543967 UTM Y: 44565 Horizontal Accuracy Estimate (GPS Data Quality):	GPS Location (taken at transect 1):	Estimated Channel Incision:	0113
on left des	0.0	1:0	0. 1	0.3	B. 4 C	0.4	0,4	17.0	0.3 7	1.0	0.3 0	07.1	Depth (m)	*					Accuracy Esti	transect		
scending bank a	790	7.600	53.9	6,10	5,350	4.6	28.58	3.10	2.35 0	6	1,85 0	0,1	Distance (m) Di	03		MARTIN	(%	\	क	<u> </u>	5	S
nk and finishi	Ó	-	0:37	0,46.	0,45.	J 5:0	9,4 -	3.4 3.	5 2	Ü,	0 61	0 1 0	Depth (m)			2		J	FM Y:	11) (110)	n) (heiat	Site #:
ing on right d	0 4.8	0	7.3	0	4	0	0 LH	is o	'n	1,7	190	9 1 0	Distance (m) Del	04		JUSTYN	(me		UTM Y: 4456549 (GPS Data Quality): +		(WBID_Site#) (m) (height between low hank width and water)	0113
lescending b	00	~	6,3	2.	D13 6.10	S.	S	Ü	0.3 2.	0,3 1,	N	011 01	Depth (m)			C	(meters) I		2 42 + 2		en low h	4
ank E Z	i a	0	7.850	7.00	6.15	0	1.45 011	3.60	2.75 0,2	0	1.05 0	0,2 0.	Distance (m) Dep	05	=	可上	Length of Survey Segment: 20x average stream width)		N W		ank wid	
-	00		7.	- 6.	6,	9	Ţ	0:2 3.	N	2	2 11	0	Depth (m) (I		ansec	T	of Surve			9	th and v	
KUN	1500	10	0.	00	0	201	1 0:2	6	00	0	12 01	0 4	(m) Depth (m)	06	Cross		y Segme width)		(feet)	9	vater)	
H	00	00	2	2	2 5.3	is in	Ť	N	ńγ	7.3	5.1	0	n (m) (m)		Transect Cross-Section		ent:					
KUN	0	0.	9012	0.3	30.2	5	7002	2002	0.1	30,1	0	7 0:1	Depth (m)	07	n		8	3			1	F
-	0 4:3	1,2	00	7.4	S.S	15.6	五	00 00	5,0	2,70		0,2	(m) (m)				(meters)					
RUN		0.1	0	10	õ	<i>B</i> .	1.00	101	0,0	0,0	107	0 .	Ce Depth (m)	80					 D:			Date:
1	7.8	is	0.6	00	Q, Q	t's	,0°	eis	6,0	5,5	15,0	4.5	m) (m)				ter Tem	Specif	ssolved		ssolved	5
大って	0.0	1.0	0.1	107	1:07	1.07	0.1	10.1	1.07	1.07	0.1	0.1	Depth (m)	09			Water Temperature: 🛞	ic Cond	Dissolved Oxygen: + + +	Č	Dissolved Oxvaen:	Disso
70	5-5	-5		7	6.6	n Û	00 T	w L	Q on	2.1	1.2	0,3) (m)		No. of the last		É	0	of the	3	N	Dissolved Oxygen L○→ Time:
Run	0,0	1.0	0 (رة 0	0.1	0,	1.07	1.07	0,0	1.07	1.07	0:-	Depth (m)	10			6	Specific Cond: 40 + 12 (µS/cm)	3 t	- 1	00	Time:
10	5-4	12	00 W	7.4	Nie	2	4,7	go Og	5	7	-	012	(m)	11			(°C)	(µS/cm)	_ (% sat)	,	(ma/L)	1256
CUN	010	1.0	0.3	0.1	0.0	1:07	1.0	0 -	1:0	0:	6,1	011	Depth (m)		THE STATE OF							3

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as <1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 1 depth = 0.1m (unless depth is insufficient)

Signed: ////// Bute: 5/21/07

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

WBID#	0113
Site#	L.

D-4- 0 Ti		-		Q;+	e Location Dec	crintian (a g road grassing):				
Date & Time:		······································			e Location Des	cription (e.g., road crossing):				
Personnel (Data C	Collectors):	C. MARTIN +.	J. Forth		PTNUC					
Current Weather	Conditions:	CLEAR				NO CO93785	UTF			
Weather Conditio	ns for Past	10 days: UNK	NowN				-			
Drought Condition	ns?: No dr	ought □; Phase I □	; Phase II □]; Phas	e III □; Phase	IV □; Unknown 🖆				
							, , , , , , , , , , , , , , , , , , ,			
Site Locations:	INATES (UN	IVERSAL TRANSVERS	E MERCATOR	R PROJE	CTION, IN METE	RS)				
		MX: 0545				454654		50000 (100001) (1000000000000000000000000		
		ETHOD (Indicate the me		etermine						
		Positioning System (G			J	Interpolat	ion			
Static Mode				L	Topographic Map or DRG					
Dynamic Mode (K				1	Aerial P	/ Aerial Photograph or DOQQ				
Precise Positionin	g Service				/ Satellite	Satellite Imagery				
Signal Averaging					Interpola	ation Other				
Real Time Differer	ntial Proces	sing								
HORIZONTAL AC	CURACY E	STIMATE								
		GPS Data Quality				Interpolation Da	ita Quality			
FOM		Meters			Source	e Map Scale: 1:24,000 1:100	,000 Other			
EPE	±_2	있니Feet or ±	Meters	3		± Feet or ± Meters				
PDOP		And the state of t				TFeet Of ±	ivieters			
Photos:										
Photo ID#	······································	Photo Purpose and D	irection	I	Photo ID#	Photo Purno	se and Direction	<u>-,-,,</u>		
(WBID Site# ##)		(upstream, downstream, c	other)		(WBID_Site#_##)		lownstream, other)			
0113.8-203	up strbe	M SITE #8	TRANSBEN	(41						
0113-8.204	DOWN STI	M SITE #8	TRANSE	1#73						
Uses Observed	': (Uses 2	ectually observed	l at time o	of surv	ev.)	L	***************************************			
		☐ Skin diving				☐ Tubing	☐ Water skiing			
☐ Wind surfing		☐ Kayaking		Boating		□ Wading	☐ Rafting			
☐ Hunting		☐ Trapping	□F	ishing		None of the above	☐ Other:			
Describe: (Includ Use Interview wh			ng, photo-do	cumenta	ation of evidence	se of recreational uses, etc. U	se Data Sheet D- Re	creational		
Surrounding Co	ndition	S*: (Mark all that pron	note or impede	recreation	onal uses. Attach	photos of evidence or unusual ite	ems of interest.)			
☐ City/county p		☐ Playgrounds	☐ MDC c			☐ Urban areas	☐ Campground	ds		
☐ Boating acces	ses	☐ State parks	☐ Nationa	al forest	S	☐ Nature trails	☐ Stairs/walkw	vay		
☐ No trespass si	gn	☐ Fence	☑ Steep s	lopes		☐ None of the above ☐ Other:				
Comments:	en he	a.b5					17			

WBID#	0113
Site#	3

Field Data Sheets for Recreational Use Stream Surveys

dications of F	luman Use*: (a	ttach photo	s)					
□ Roads	☐ Rope swings	☐ Foot path	ns/prints	Dock/platform	☐ Livestock	Watering	□ RV	ATV Tracks
☐ Camping Site	S	☐ Fire pit/ri	ng 🗆	NPDES Discharge	☐ Fishing T	ackle	☐ Othe	er:
Comments:	NONE							
ream Morpho	logy:							
		scriptions:	Is there any	water present at	this view?	Yes □	l No	
eranni eran eran eran eran eran eran eran eran	255 mil III MASI KAMASSASI (2765 SAMATIS ATAWA SAMATA SAMATA		If so, is ther	e an obvious curi	rent? □	Yes □	No	
Select one of t	he following cha							
Channel Feature	Transect (#) Dista	nce from	Width (m)	Length (m)	Median D	epth (m)	Max. Depth (m)
RIFFLE		acc	ess (m)					
RUN								
POOL								
Channel Feature	he following cha	m access (m)	es: Width (m) Length	(m) Med	lian Depth ((m)	Max. Depth (n
Channel Feature RIFFLE	Distance fro	m access (m)	Width (m) Length	(m) Med	lian Depth ((m)	Max. Depth (m
RUN								
POOL								
-141-*- (TI	1 1 1		0007.)					
% Co	ese values should	% Gravel		Sand	% Silt //	% Mud/	/Clav	% Bed
							<u> </u>	70 200
quatic vegeta	tion": (Note amo	ount of veger	tation or alg	al growth at the a	issessment site	:.)		
None								
ater Characte	ristics*: (Mark	all that apply	v.)					
ODOR:		☐ Sewage		cy Chemical	₩ None	☐ Oth	er:	
COLOR:		Clear	☐ Gree		☐ Milky			····
BOTTOM DEPO	OSIT:					☐ Othe		
	CE DEPOSITION:				-			
WHILK BOILT	CE BEI OBITION.	□ Oil	☐ Scur	n 🗆 Foam	None	Oth	er:	
omments: Plea	ase attach any ad	ditional com	ments to thi	s form.				
mprehensive unde	erstanding of water	r conditions.	Consequently	tional use designat y, this information as that need further	is not intended t	o directly	influenc	e a
ease verify that	you have comp	oleted all sec	tions, check	ked all applicabl	le boxes and t	hat every	ything i	s complete.
		11.				_/	r	
ırveyor's Signat	ure: <u>Jlme</u>	Mar	of and a second	Date o	f Survey:	5/211	107	

Notes:	Feature Type (nffle, run, or pool)	12	11	10	9	&	7	o	O1	4	ယ	2	_	Measurement										
	Z,	2,4	Ü	Ň	periodos A Augustas	ã	0,9	0.8	4.0	90	à	0,4	0,3	Distance (m)	2		Field	,	Averag		GPS Lo	Estimat	Waterb	
vill be meası	Z	0.0	<u> </u>	0	0.2	9.7	0.2	0,15	0,15	51.0	0,15	0, -	0:1	Depth (m)	_		Staff:		e Strear	Horizor	ocation (led Cha	Waterbody ID:	
Transects will be measured beginning on left descending bank and finishing on right descending bank.	Pari	40003	in single	10 87	0 E	3,75 20,	2.7 20.1	2.25 20.	00 -	138 6	0.9	24 6.1	0,0	Distance (m) Depth (m)	02		Field Staff: VENEE) 	Average Stream Width:	Horizontal Accuracy Estimate (GPS Data Quality):	GPS Location (taken at transect 1):	Estimated Channel Incision:	2 2 3	
left descend		gran	Ž,	- - - - - - - - - - - - - - - - - - -	ري 00	13,7	ー い で	P. P.	22.2	- Or		100	0	Distance (m)			MARTIZ		<i>c</i> 0	y Estima	nsect 1) ∛			
ding bank ar	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7 0,0	9	0	0,1		~	0	\$	3	0	3	0	nce Depth (m)	03		Ź			ate (GP		(volu_sie#) (n) (height between low bank width and water)	Site #:	
nd finishing		15.8	(X)	w	2	N	13	- Co	Ž		0.0	0,6	0.3	Distance (m)			4 00			S Data	*	(height		
on right des	RUN	0	<i>o</i>	9	0	0	0	0	9	ō	G	Ö	20 0	nce Depth (m)	04		SPISO		(meters)	Quality)	IITM Y AASAA SA	ght between	0113 -	
cending ba		0 316	ψ)	ش	T W	2,73	200	223	27	2 13	2 - 3	2 1.25	70) (m) (m)			あれ	` <u>`</u>		`` ` *	4	n low ba	[00	b
닺.	70	0,3	5 03	0,3	0000	0.3	3	0	0.7	3	0	9	0	Depth (m)	05	H	the free	(20x average stream width)	Length of Survey Segment:	200		ink widt		
		4.5	0)	S	1	2	, , , , , , , , , , , , , , , , , , ,	Oy.	N	2	12		B	1)	ansect		stream	f Survey			h and w		
	Rund	@ .	0	<u></u>	N	A. Careeron	0	ò	0	0	Ö	0	î6 0,	(m) Depth (m)	06	Fransect Cross-Section		width)	/ Segme	(feet)		/ater)		
		\[\tilde{G}\]	Ş	۵.,	Č0	47 0	0	N O		رم)	<i>P</i>	Agrico.	-	_	?	-Section		1	ent: /leつ					
	70 2	0 0	0 1 -	9	0	8 0		0 : 0	0.0	0	Con	0	9	(m) Dept	07	on			d					
		たた。	9.6	- 5.95	- 53	59.17 0	-	0 W. XX	0			7.0	0,	Depth (m) (r					(meters)					
	RUN	0	0	S	3000	0.0	4,00,0	8	\$ J	2.05 40:1	6	+	0	(m) Depth (m)	8				ers)				Date:	
		0	6,	<u></u>	(N)	のより	0 3.6	37	1 2.4	÷	1-2	1010	0,0		2			Water Temperature:	Spe) (Dissolved Oxvaen:	Dissolved Oxygen:	[6.	
	Root	600 013	0 3	0 1	00 0	2018	015	0 N	704	ļ	20:4	5 0 o	0 0 2	(m) Depth (m)	09			mperati	ecitic Co		ed Oxvo	ed Oxyg	5/21/07	
		W	W		in w	5 2.85	5 26	<u> </u>	4 2.1	0/3 1.85	÷	7 33	~		2				ma:	. :	en.		H	ssolve
	RUN	0.0	0	3.38011	0	N - O	6	2.35	0	22	0	0 2	0	(m) Depi	6			22,2	Specific Cond:		OK.	シック	Time:	Dissolved Oxygen
		0	5	1 245	2.2	1.95	77	一天	N	erritany.	0,7	10,4	0	Depth (m) (r	2			(00)			との。と(% sat)	(mg/L)		len
	202	Ō	4	1	2012	3000	3 0 7	0	9	0.95 0.1	7 03	110 Sh	0	(m) Dept	⇒			ٺ	(µS/cm)		sat)	3/L)	252	
		Q	7). -heges	20	0	W	w	Ĉ	6	_assisting	9u	Paragraphics	Clim 	Depth (m)										

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

	Signed:
6	
	Mark
10-52-57	Date:
Coltals The	5/21/07

WBID#	0113
Site#	9

Date & Time:		1 2 14	20	Sit	te Location Desc	ription (e.g., road crossing):				
		67 14:								
Personnel (Data C	Collectors):	L. MARTIN 4 J. F.	ortt		HW4 II					
Current Weather	Conditions:	CLEAR				RUEEN CITY WI	UTF			
Weather Condition	ons for Past	10 days: UNKNO	WW							
Drought Conditio	ns?: No dro	ought □; Phase I □	; Phase II	□; Phas	e III □; Phase	IV □; Unknown ધ				
Site Locations:										
	DINATES (UN	IVERSAL TRANSVERSI	E MERCATO	OR PROJE	CTION, IN METER	S)				
Site GPS Coord	linates: UT	MX: 05475	746		Y: 44	53409				
HORIZONTAL COL		THOD (Indicate the met		determine)				
Static Mode	Global F	ositioning System (GI	PS)		Topogra	Interpolation in the polar in t	tion			
Dynamic Mode (K	(inematic)	1				otograph or DOQQ				
Precise Positionir					Satellite					
Signal Averaging				+	<i></i>	tion Other				
Real Time Differe	ntial Proces	sina		-						
HORIZONTAL AC										
STOCKED AND CONTRACTOR OF THE PROPERTY OF THE		GPS Data Quality				Interpolation Da	ıta Quality			
FOM		Meters			Source	Map Scale: 1:24,000 1:100	.000 Other			
EPE	±_2	しる_Feet or ±	Mete	ers	±Feet or ±Meters					
PDOP		eta filmenta esta esta esta esta esta esta esta es				±reet of ±	weters			
Photos:										
Photo ID#		Photo Purpose and Di	irection		Photo ID#	Photo Purno	se and Direction			
(WBID_Site#_##)		(upstream, downstream, o	ther)		(WBID_Site#_##)		downstream, other)			
013-9-205	UPSTREAM	SITE HA TILA	usect t	7-1						
0113_9-206	DOWN STA	LBAM SITE #9	I TRANSE	ect 41						
lses Observed	*: (Uses a	ctually observed	l at time	of surv	vey.)					
☐ Swimming		☐ Skin diving		SCUBA	diving	☐ Tubing	☐ Water skiing			
☐ Wind surfing		☐ Kayaking		Boating		☐ Wading	☐ Rafting			
☐ Hunting		☐ Trapping		Fishing		None of the above	☐ Other:			
Describe: (Include Use Interview when the Interview			ng, photo-d	locument	ation of evidence	e of recreational uses, etc. U	se Data Sheet D- Recreational			
Surrounding Co	ondition	S*: (Mark all that pron	note or impe	de recreati	ional uses. Attach	photos of evidence or unusual it	ems of interest.)			
☐ City/county p	oarks	☐ Playgrounds	□ MDC	conserva	ition lands	☐ Urban areas	☐ Campgrounds			
☐ Boating acce	☐ Boating accesses ☐ State parks ☐ Natio					☐ Nature trails	☐ Stairs/walkway			
☐ No trespass s	ign	☐ Fence	☐ Steep	slopes		☐ None of the above	Other:			
Comments:	gelds									

WBID#	0113
Site#	9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

ndications of Hum	an Use*: (a	ttach photo	os)							
□ Roads □	Rope swings	☐ Foot pat	hs/prints	☐ Doc	k/platform	☐ Liv	vestock V	Vatering	□RV	/ ATV Tracks
☐ Camping Sites		☐ Fire pit/r	ring	☐ NPI	DES Discharge	☐ Fi	shing Ta	ckle	□ Oth	er:
Comments:				•						
	NONE									
tream Morphology	V.									
Upstream View's]		crintions:	Is there a	any wate	r nresent at t	thic wiev	x/? □ '	Yes □	Nο	
P. M. M.		0011101/17 00 27101101111111111111111111								
Select one of the fo	llowing cho			nere an	obvious curr	ent?		7es □]	NO	
Channel Feature	Transect (#	f) Dista	ince from sess (m)	Wi	dth (m)	Length ((m)	Median Dep	oth (m)	Max. Depth (m)
RIFFLE		acc	233 (III)			·				
RUN										
POOL										
Select one of the fo	ollowing cha		es:		n obvious cu				□ No	V 5 1/5
RIFFLE	Distance from	n access (m)	Widt	n (m)	Length ((m)	Medi	an Depth (n	1)	Max. Depth (m)
RUN										<u>ngi sa Santar Santar.</u> Mga Pagara
POOL	Est III									
ubstrate*: (These					-		T			
% Cobble	35 9	% Gravel	75	% Sand	Control of the Contro	% Silt	-936	∕% Mud/C	lay	— % Bedro
quatic Vegetation	*: (Note amo	ount of vege	tation or	algal gr	owth at the a	assessme	ent site.)		
NONE										
ater Characterist	ics*: (Mark a	all that appl	y.)							
ODOR:		☐ Sewage	e 🗆 N	Musky	☐ Chemical	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	None	☐ Other	:	
COLOR:		Clear		Green	□ Gray		l Milky	☐ Other:		
BOTTOM DEPOSIT:		☐ Sludge	. 🔲 :	Solids	Fine sedime	ents 🗆	None	☐ Other	:	
WATER SURFACE I	DEPOSITION:	□ Oil		Scum	□ Foam	<u> </u>	None	☐ Other	:	
omments: Please a	ttach any add	litional com	ments to	this for	m	¥				
	accept unity was			101	•••					
This information is not										
emprehensive understant ecision on the recreation										
						•				
ease verify that you	and the same of	f						-	_	is complete.
rveyor's Signature:	Mila	u Mar	<u> L</u>		Date of	f Survey	r: <u> </u>	1210	night.	
ganization: AE	SOLUTIO	w/5		_ Positic	n: <u>FN</u>	W. S.	PEZIA	215+		
		140	the second	E - 2	7 -05		/h	da ul=	-7	

Feature Type (riffle run, or pool)	12	11	10	9	&	7	o o	Съ	4	43			Measurement				
	رکړ .	3,2	2,9	2,6	12,13	0/2	+1			3 ()	20,5	0.3	Distance (m)	6		Averag Fiel	Waterk Estima
RUN Person	0,0	0,1	0,1	0,1	011	0, -	0:2	0:2	Ø; (')	0:2	0,2	0,/	Depth (m)	01		UTM X: Horizor erage Streal Field Staff:	oody ID: ted Cha
red beging	3.7	3.2	2.9	6	2,3	2,0	mpr.)	morphone from morphone	Amoracos Appropriates	9,0	0,5	0,2	Distance (m)	02		UTM X: BY 754 Horizontal Accuracy Average Stream Width: 6 Field Staff: RENEE	Waterbody ID: <u>01/3</u> Estimated Channel Incision: <u>∠/</u> ,
Cu N	6,0	2	<u>_</u>	<i>in</i>	<i>U</i>	<i>b</i>	0,7	<i>U</i>	0.20	0.2	0 7	e _	Depth (m)	2		Iracy Estin	ision:
Kending hank	35	2,2	2.0	Ġ.	6		17	ò	8,0	0.6	4.4	0.2	Distance (m)	ಜ		Estimate (G	11): (C): (D)
nk and finish	0.02	<u></u>		<u> </u>	0:2	0.2	0.7	0,1	0.1	0 // 0	0.10	0 -1 6	Depth (m)			OTM Y: (GPS Dat	Site #:
Transports will be measured harding on left descending bank and figishing on gight descending bank	8	5 17	~ ~	0 41	is a	<i>i o</i>		0,0	4.0	0 0 0	00	0:10	Distance (m) De	24		JTM X: 0547546 UTM Y: 4453469 Horizontal Accuracy Estimate (GPS Data Quality): 9 stream Width: し・○ (meters) Staff: RENEE MARTIN 4 JUSTAN	Site #: <u>O//3 - 9</u> (WBID_Site#) // O (m) (height between low bank width and water)
descending	, o		6	62	0 - 1	2	3	-	0,1		0 - 0	7	Depth (m)				e#)
lQv N	0	6.00	7 17.50	で で た か た た	4.2 4	6	3,0 0	24 /	00	1	<u>5</u>	0	Distance (m) De	05		+/- 23 (feet) Length of Survey Seg (20x average stream width)	bank wi
	7.	2011 7	6	Ω. P.	1.02	2	<u>ω</u> ω	61/2	2.	6.1	Photos.	0.0	Depth (m)		ransec	3 (of Surve	dth and
Bus	3	7,0 40	1.01 W	6	H9 70°	4.2	3.5 4	7.8 0.0	<u>`</u>	E O	0,70	Ġ O	Distance (m) Dep	06	t Cros	- 23 (feet) Length of Survey Segment. Ox average stream width) For H	water)
Garagian (re.	10 4.4	12 12 12 12 12 12 12 12 12 12 12 12 12 1	3000	\(\int_{\rho}\)	MINISTRA	20, 2	2011 2.145	<i>i</i> ,	0	· .	7 1105	W 01	Depth (m) (r		Transect Cross-Section	1	
スクス	4 0.2	20,2	37 0.7	0	3,50	8 0,1	75 2011	107	1.75 2011	4 201	0:1	10 H	(m) Depth (m)	07	nc	So	
-	20.0	Dis 1	2 2 3	40	3:5	3,0	- 2.5	7.0	1.5	ò	5,5	0,0	Distance (m)			(meters)	
D. FR.	0 0	2 201	0	0.1	0 -	1.07	0,0	107	1,07	1.01	1.07	Ö	Depth (m)	80		<u> </u>	Date:
	2 7 5	77.0	533	50	5.25	- K	3,75	73,0	1 2.25	- 13	54.01	0 %	Distance (m) (m)			issolvec Spec ater Tem	ssolve
President	0	107	101	0	0,0	101	Ø ₁ (0	5/01	0	9	0	Depth (m)	09		Dissolved Oxygen: Specific Cond: Water Temperature:	le: 5/2//07 Dissolved Oxygen:
7	\$2 \$3 \$3	ヹ	<u>٦</u>	& ?S	3,2	(y)	2,4	20	è	1.2	<u>a</u>	2,0	Distance				
O. WPCV	010	<u></u>	0	<u>~</u>	<u> </u>	0	60	0	C> 	S	20,1	0	Depth (m)	10		432.0	Nygen: 7,5 /
B. WORK	× 5,0	O,O	いか	P F	33	3.0	5.5	2.0	in	-, 0	9 3\	5	Distance (m)	_		_(% sat) _(µS/cm)	(mg/L)
\$	0	101	1.07	1.02	1.07	0	<u> </u>	0 .	101	20,1	107	<u>o</u>	Depth (m)	3	Till and the second	<u> </u>	0

Mark dry depth measurements as 0, measurements less than 0.1m as <0.1; and greater than 1m as <1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0.m.

Signed: While Man

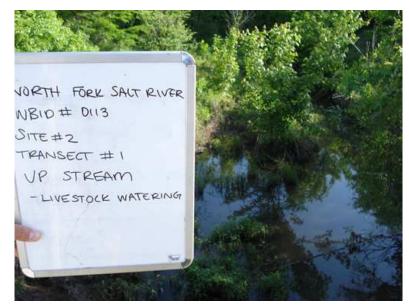
anc 5-23-09 Myshafet

Transects in order of up to downstream.

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.



Site# 1 Photo ID# 185, Transect 1, Upstream



Site# 2 Photo ID# 187, Transect 1, Upstream



Site# 1 Photo ID# 186, Transect 1, Downstream



Site# 2 Photo ID# 188, Transect 1, Downstream



Site# 2 Photo ID# 190, T 3, Livestock Watering



Site# 3 Photo ID# 193, Transect 1, Upstream



Site# 3 Photo ID# 194, Transect 1, Downstream



Site# 4 Photo ID# 195, Transect 1, Upstream



Site# 5 Photo ID# 197, Transect 1, Upstream



Site# 4 Photo ID# 196, Transect 1, Downstream



Site# 5 Photo ID# 198, Transect 1, Downstream



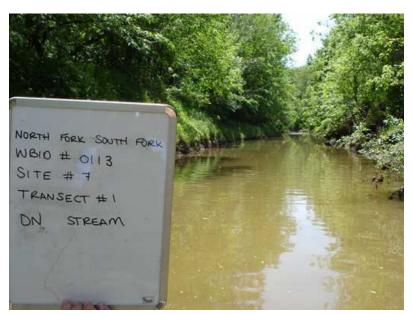
Site# 6 Photo ID# 199 Transect 1, Upstream



Site# 7 Photo ID# 201, Transect 1, Upstream



Site# 6 Photo ID# 200, Transect 1, Downstream



Site# 7 Photo ID# 202, Transect 1, Downstream



Site# 8 Photo ID# 203, Transect 1, Upstream



Site# 9 Photo ID# 205, Transect 1, Upstream



Site# 8 Photo ID# 204, Transect 1, Downstream



Site# 9 Photo ID# 206, Transect 1, Downstream